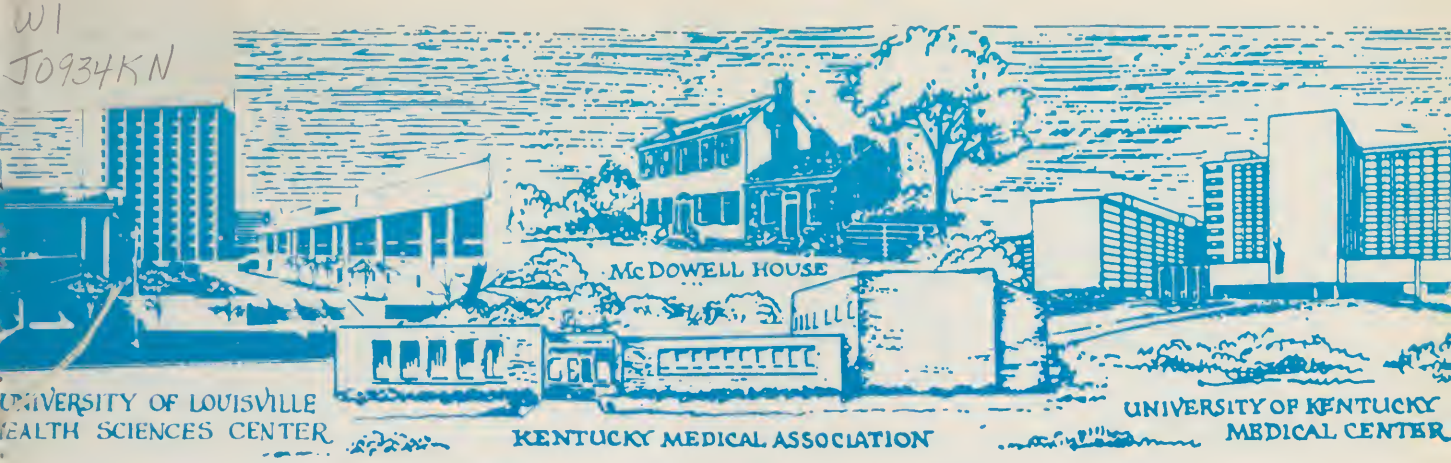
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The Journal of The KENTUCKY Medical Association

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OF MEDICINE

Chromophobe Adenomas of the Pituitary Glan
Joe G. Conley, M.D., C. Gene Follis, M.D., and John P. Gearha

A Case of Meningitis Admitted as Schizophrenia
Nat H. Sandler, M.D. 25

Pleural Thickening Simulating Intrathoracic Tumor—Case Report
Abdu Dahhan, M.D. 27

1974 Constitution and Bylaws of KMA 39

Complete Contents on Page 5

VOLUME 73 JANUARY 1975 NUMBER 1

Both often



Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

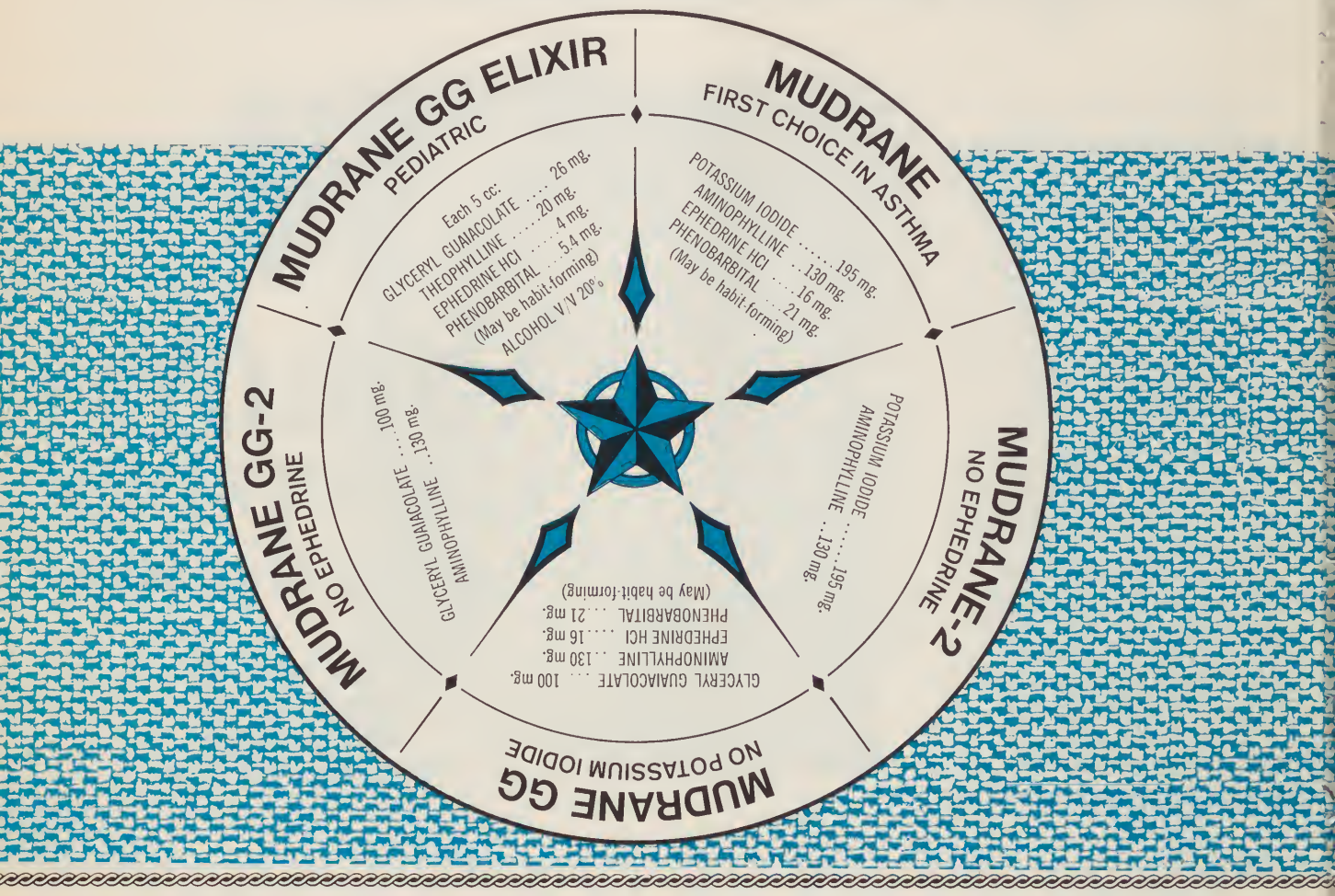
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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The MUDRANES

Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

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Journal of The KENTUCKY Medical Association

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MESSAGE FROM THE PRESIDENT

Whose AMA?

RECENTLY I attended the American Medical Association's meeting in Portland, Oregon. I have belonged to the AMA for years but somehow it has felt remote to me. Some physicians express the feeling that the AMA is "politics" somewhere in Chicago, giving the feeling that it is someone else's organization.

In Portland I found the AMA hard at work on numerous projects and in financial crisis. To some, the financial crisis was hard to comprehend. Basically, the AMA had to face the ever-increasing costs with a nonchanging, fixed income. Neither the AMA nor anyone else can pay the 1974 costs of running a big organization and financing new programs with a fixed income that barely covered expenses several years ago.

It was refreshing to learn that the organization that felt so distant has done things for me and for every other physician, including being instrumental in raising the Keogh retirement benefits to $7,500.00 annually, providing good life insurance, giving their learned opinions in health matters to many parties, and others. Why is it then that the percentage of physicians who are dues-paying members in the AMA was lower in 1973 than it was in 1960? I find that there are many fine physicians who do not belong to the AMA, and some give sensible reasoning. Why?

My friends, this is 1975 and it is no time to weaken the AMA by staying away from it. The AMA may have faults, but it is the only organization that historically speaks for our profession. This is a critical period in American medicine. To stay away from our medical organizations can only help the forces who want to see our profession powerless and divided. Never before could your involvement or noninvolvement play such an important role in shaping the future of our profession. The AMA may not be perfect, but it is the only AMA we have. This is the time to join the AMA, improve it with your suggestions and strengthen it with your financial support.

In my opinion, the AMA does devote considerable, but should concentrate all its efforts to the best medical care to the public, and to what is the best for our profession. The AMA should draft a Physicians Health Care Delivery Program, superior to any legislative proposal, and we all should carry this to the public and the legislators, loud and clear. The AMA should conduct periodic surveys to search for problems and suggestions from member and nonmember physicians. The AMA should be the leader in the efforts to solve such critical problems of our profession as malpractice, or whatever physicians may have to face.

Then nearly all of the physicians could proudly call this great organization "our AMA", and support it actively.

Wishing you a happy and successful New Year,

LASZLO MAKK, M.D.
VICE PRESIDENT

This is the first in a series of articles written at the request of KMA President Hoyt D. Gardner, M.D.

A Link in the Chain

auxiliary

Please Cut On Dotted Line

YOUR State Auxiliary has had a stimulating start for the coming year, with many new members being reported by several of the organized county auxiliaries. We even have one reactivated component, the Woman's Auxiliary to the Mason County Medical Society. As I travel about the Commonwealth, I find fresh enthusiasm and effort being put forth to promote the welfare of the Kentucky Medical Association.

Husbands of potential — or actual — Members-At-Large should take note of our efforts this year particularly. We have long felt that much of our strength could lie among those women who do not live in our large metropolitan areas. The fellowship generated by membership in the state auxiliary has been minimal for them, unless they have chosen to participate in our annual convention, fall and spring board meetings. This year, however, we are striving to make them realize that membership is valuable, not only in social context, but in the services we are able to provide. All physicians' wives are asked to participate in community affairs, particularly in the realm of health-related projects. We have information, materials and programs designed to assist them, in many areas of concern. Unless they join with us, and communicate their needs, we are not able to assist them. In order to make known our available services, we are attempting to develop a personal relationship with our Members-At-Large: with regular WA-KMA president's letters; with direct contact by the district councilors of their areas; and lastly by encouraging the organized auxiliaries in their areas to invite them to participate in programs, whenever feasible. We are hoping to make membership in the WA-KMA meaningful to all members, by showing our concern and interest, as well as usefulness, to the women who live in our smaller communities. We want them to join us — we can do more together!

Furthermore, in addition to being of assistance, whenever asked by county societies and the state association, the organized auxiliaries have been asked to make a community survey of their individual areas, in order to determine health service needs that they might be able to fill. Our hope and anticipation is that we will uncover new volunteer opportunities, that will be our future areas of concern.

Unless you, the physician who reads this page, tell your wife that we want her, need her and are anxious to have her help us promote the aims of the KMA, this page, "A Link in the Chain", is a wasted portion of your KMA Journal. Do yourself and her a favor! TEAR IT OUT! TAKE IT HOME! Encourage her to find out what we have to offer.

MRS. RICHARD B. MCELVEIN, PRESIDENT
WOMAN'S AUXILIARY TO KMA

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

JANUARY

15-16 KAFP Northern Kentucky Scientific Seminar, "Hematologic Oncological Disorders", Rowntowner Motor Inn, Ft. Mitchell

FEBRUARY

12-13 "Family Planning in a Rural Community", Mountain Maternal Health League, Inc., Berea

14 Louisville District Dietetic Association Program Series, St. Joseph Infirmary, Louisville

14-15 International Colloquium in Psychopharmacology, Health Sciences Center Auditorium, University of Louisville

MARCH

19-20 21st Annual Symposium on Cardiovascular Diseases, HSC Auditorium, University of Louisville

22 Kentucky Society for Histotechnology Symposium, HSC Auditorium, University of Louisville

APRIL

3 "Advances in Management of Coronary Artery Disease", The Lexington Clinic, Lexington

10-11 "Abortion Counseling", Mountain Maternal Health League, Inc., Berea

26-29 Modern Management of Major Problems in Surgery, Galt House, sponsored by University of Louisville

IN SURROUNDING STATES

JANUARY

15-16 "Controversies in Surgery",* sponsored by the Cleveland Clinic Educational Foundation, Cleveland, Ohio. Fee: $100

25 Ventilatory Problems Workshop, sponsored by Oak Ridge Hospital, at Holiday Inn, Oak Ridge, Tennessee

FEBRUARY

3-7 "Current Concepts in Oncology",** ACP postgraduate course, University of Michigan Towsley Center, Ann Arbor

17-20 Southeastern Surgical Congress, Hyatt Regency Atlanta Hotel, Atlanta

MARCH

26 "Care of the Critically Ill Child",*** sponsored by The Children's Medical Center, Dayton, Ohio, and Wright State University School of Medicine. Fee: $20

APRIL

21-24 American College of Surgeons Spring Meeting, Regency Hyatt House and Marriott, Atlanta

---

*Contact: Sharon Tacheno, Education Secretary, Cleveland Clinic, 9500 Euclid Ave., Cleveland 44106

**Contact: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia 19104

***Contact: Director, Children's Medical Center, 1735 Chapel St., Dayton 45404

"FEELING GOOD", a new series on the Public Broadcasting Service TV stations, conveys information on good health practices through entertainment techniques. Topics to be covered in the next month's programming include:

January 15—Prenatal care, paying for care, dental care and nutrition.

January 22—Weight control, alcohol abuse, heart disease, and preschool screening.

January 29—Allied health personnel, parenting, doctor/patient communication, and cancer.

February 5—Dental care, neighborhood care, hypertension, and nutrition.

GENERAL INTERNIST, board qualified, with or without subspecialty training, to join internist group of four. Salary first year, to graduate into partnership. Excellent working conditions, hospital affiliation, and consultant group to work with. Contact **Dr. John E. Myers, Jr., 2370 Nicholasville Road, Suite 206, Lexington, Kentucky—(606) 277-6145.**

EIGHTY-SIXTH ANNUAL MEETING of the MID-SOUTH MEDICAL ASSOCIATION

FEBRUARY 10, 11, 12, 13, 14, 1975

at the

ARLINGTON HOTEL

HOT SPRINGS, ARKANSAS

Outstanding speakers will discuss subjects of interest to both family practitioner and specialist. Panel discussions daily. Scientific sessions — 8:30 A.M. to 11:30 A.M. — Monday, Tuesday, Wednesday, Thursday and Friday. The University of Tennessee, The University of Mississippi and The University of Arkansas will participate in the program. These schools have also arranged class reunions and dinner meetings for their alumni.

In addition to an excellent scientific program, there are activities such as, "baths", "golf and tennis", "horse-racing", "fashion shows", "antique shows and shops", and the famed Hot Springs Museum.

Room reservations should be made immediately through the "Housing Bureau — Hot Springs Convention Bureau"!!

MAKE YOUR PLANS NOW TO ATTEND THE MID-SOUTH MEDICAL ASSOCIATION MEETING

FEBRUARY 10, 11, 12, 13, 14, 1975

HOT SPRINGS, ARKANSAS



Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed: "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."*

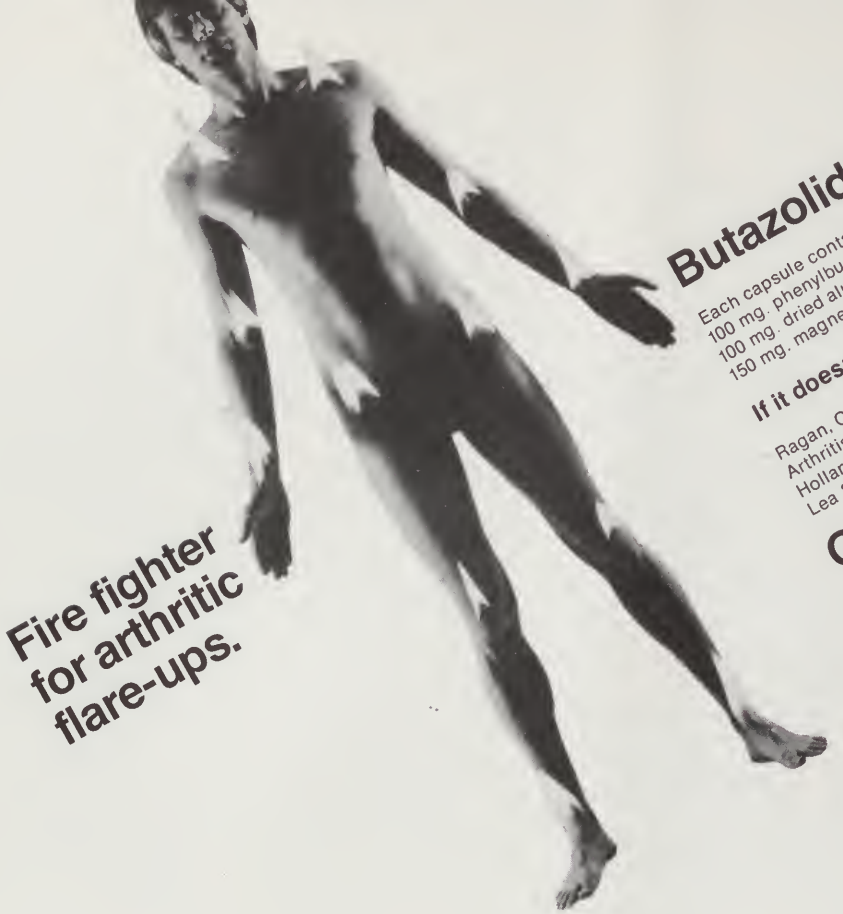
If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you can get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.



Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

Ragan, C.: The Clinical Picture of Rheumatoid Arthritis, in Arthritis, ed. 8, edited by J. L. Hollander and D. J. McCarty, Jr., Philadelphia, Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Fire fighter for arthritic flare-ups.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

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ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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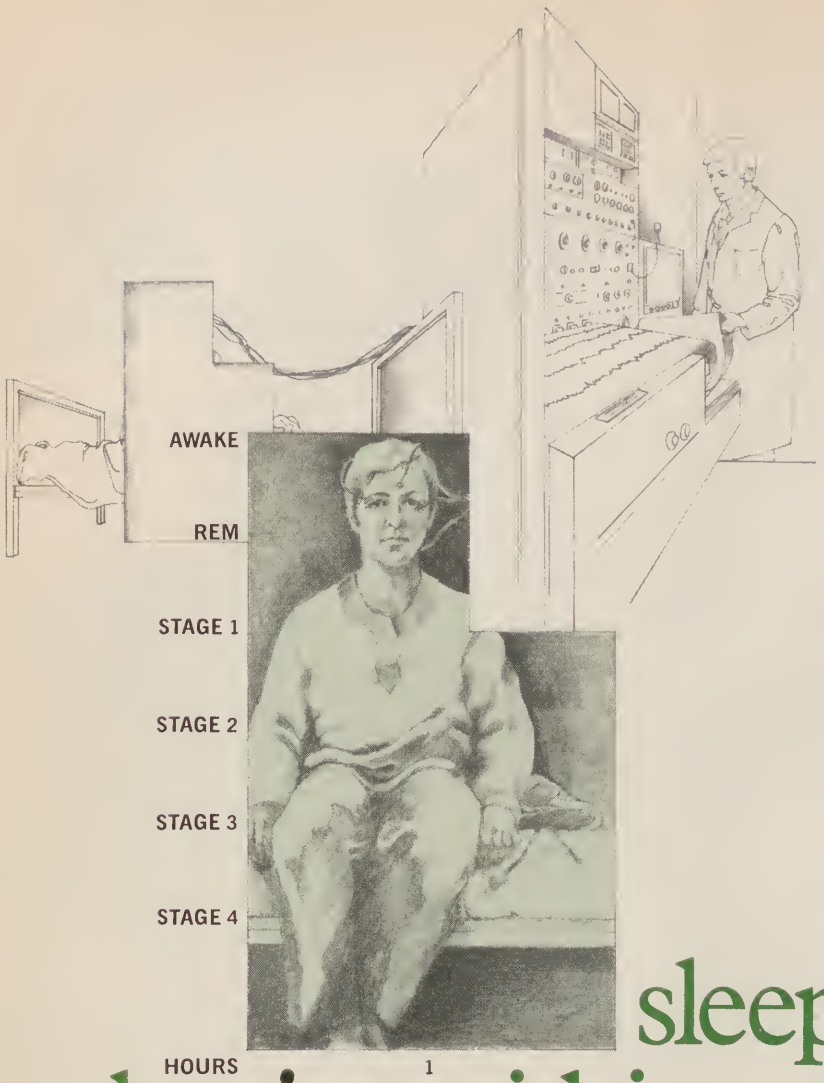
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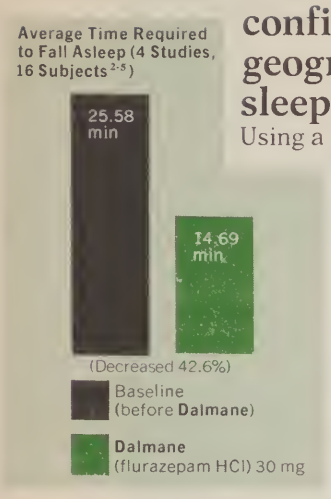
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proved by a 22-night clinical study of insomnia patients in the sleep research laboratory and at home[1]

Three insomnia patients selected for difficulty falling asleep were administered Dalmane (flurazepam HCl) 30 mg for 14 consecutive nights. Placebo was given for four nights prior to and four nights after Dalmane. Physiologic tracings on Dalmane nights 1-3 showed sleep induction time averaged 13.90 minutes; on Dalmane nights 12-14, 18.80 minutes. Combined average for the 6 monitored drug nights was 16.35 minutes.[1]



confirmed by clinical studies in four geographically separated sleep research laboratories[2-5]

Using a 14-night protocol involving eight insomniac and eight normal subjects, four studies confirmed the sleep-inducing effectiveness of Dalmane (flurazepam HCl) and the reproducibility of this response. On average, one 30-mg capsule induced sleep within 17 minutes. In all these studies, Dalmane induced sleep rapidly, reduced nighttime awakenings, and provided 7 to 8 hours of sleep without repeating dosage[2-5]

Dalmane (flurazepam HCl) induces and maintains sleep, with relative safety

Dalmane is generally well tolerated; morning "hang-over" has been relatively infrequent. While dizziness, drowsiness, lightheadedness and the like have been noted most often, particularly in the elderly and debilitated, physicians should be aware of the possibility of more serious reactions, as noted below.

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.
Contraindications: Known hypersensitivity to flurazepam HCl.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.
Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.
Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.
Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.
Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.



when restful sleep is indicated

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.* — usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.* — initial dosage for elderly or debilitated patients.

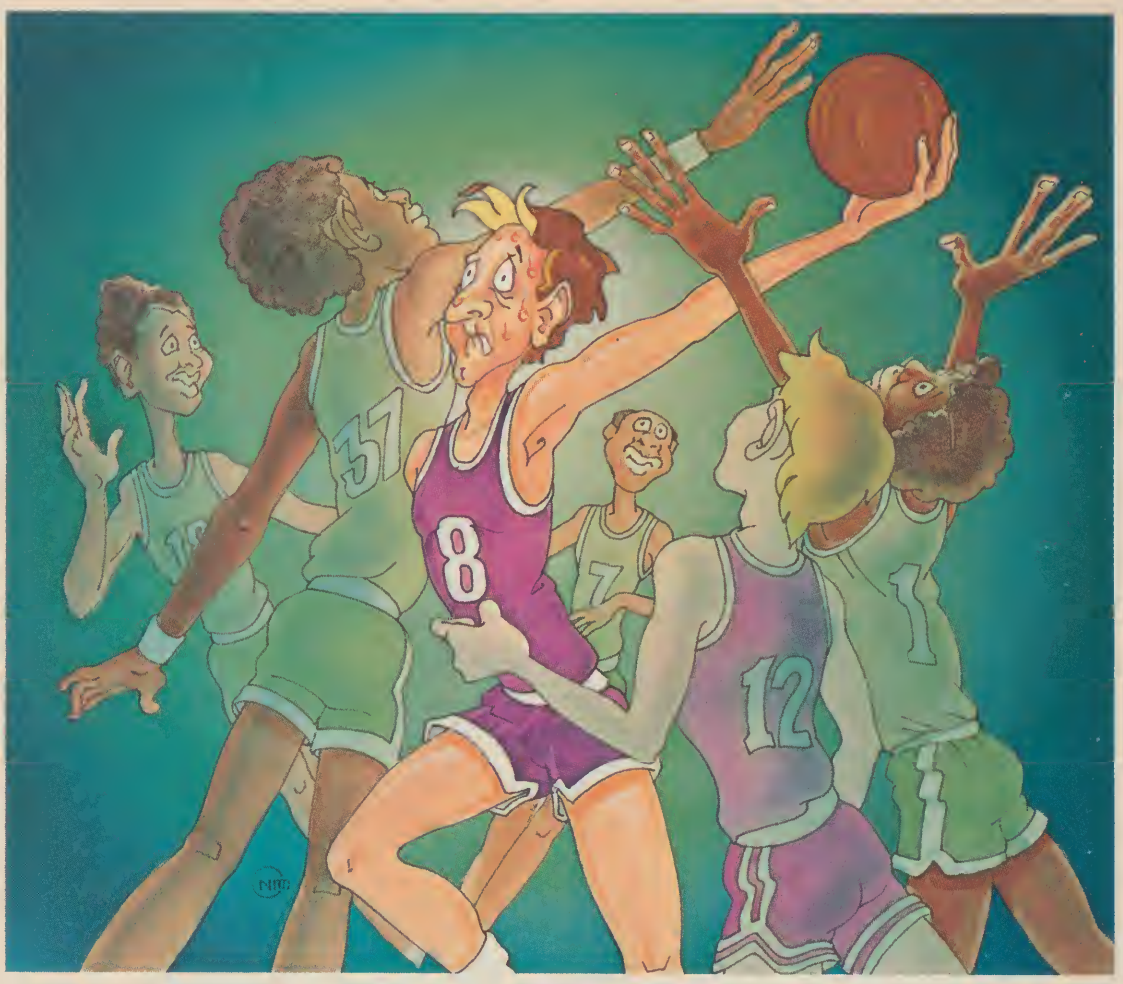
- **induces sleep within 17 minutes, on average**
- **reduces nighttime awakenings**
- **sustains sleep 7 to 8 hours, on average, without repeating dosage**

REFERENCES: 1. Kales A, *et al*: *Arch Gen Psychiatry 23*:226-232, Sep 1970
2. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
3. Frost JD Jr: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ
4. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ
5. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ

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Each tablet and each 5 ml. of liquid contain:
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(Warning: May be habit forming)
atropine sulfate ..... 0.025 mg.

Usually stops diarrhea promptly.

IMPORTANT INFORMATION: *This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdosage or individual hypersensitivity, reactions similar to those after meperidine or morphine overdosage may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Nalline® (nalorphine HCl) or may be evidenced as late as 30 hours after ingestion. LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.*

Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria and paralytic ileus.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. Use a narcotic antagonist in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. *Liquid,* 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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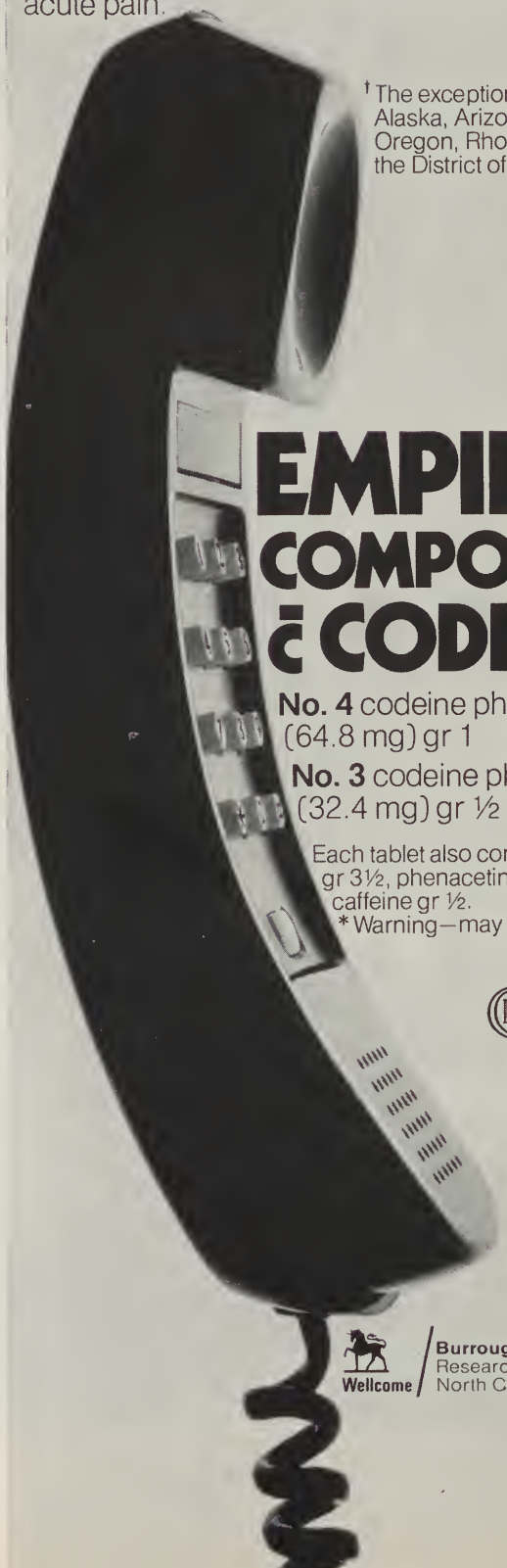
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VOLUME 73 JANUARY 1975 No. 1

Chromophobe Adenomas of the Pituitary Gland

JOE G. CONLEY, M.D.,* C. GENE FOLLIS, M.D.,** AND JOHN P. GEARHART***

Louisville, Kentucky

An analysis of 40 cases of chromophobe adenoma was done to determine the role irradiation plays in their management. Irradiation was most useful as an adjunct to surgery, but was beneficial in some cases as the sole treatment.

THE chromophobe adenoma is the most common primary tumor of the pituitary gland. Of the 45 primary tumors treated at the University of Louisville Radiation Center in the past 18 years, 39 have been either proven or presumed chromophobe adenomas. Six were classical eosinophilic adenomas; two were basophilic adenomas.

Although chromophobe adenomas may cause a number of physical findings and symptoms, and a broad range of endocrine abnormalities, the diagnosis is usually suspected when typical visual disturbances and headaches are accompanied by radiographic evidence of enlargement of the sella turcica. Histologic proof of the diagnosis is frequently not obtained because there is some belief that radiation therapy alone is sometimes successful in controlling these tumors, and because surgery in this area is obviously not without its risks. Considerable experience with radiation therapy has shown that the presently-employed treatment plans are usually free of harmful long- or short-term effects. Bouchard maintains, nevertheless, that the treatment of choice is surgery followed by radiation, since this approach has in his experience resulted in a significantly better long-term control rate than radiation alone. He also maintains that surgery should not be relied upon as the sole method of treatment because the recurrence rate in several series of cases has amounted to 50 or 60%.[1]

Our own case material includes 25 cases (63%) treated by radiation alone, and 15 cases (37%) treated by radiation following biopsy and a variable degree of surgical removal. In all but one case the tissue was obtained by craniotomy and, in that particular case, the tumor had eroded into the nasopharynx, permitting a transnasal biopsy. Unfortunately, some of these patients have either been lost to follow-up entirely or have been followed for relatively short periods of time. As a result, our capacity to draw valid conclusions concerning the efficacy of treatment is somewhat limited. We do feel, however, that some tentative conclusions are possible. Moreover, we feel that our case material provides some significant statistical insights into this disease.

Presentation of Findings

Chromophobe adenomas show no definite predilection of either sex. If the exclusively male Veterans Hospital material is subtracted from our case total, the remainder consists of 16 males and 13 females.

Although chromophobe adenomas may be found at almost any age beyond adolescence, our case material showed a striking peak from age 40 to age 49 with 43% of our cases drawn

*University of Louisville Radiation Center, Louisville, **Director, Therapeutic Radiology, St. Mary's Hospital, Evansville, Indiana, and ***University of Louisville School of Medicine

from this group. Seventeen of our 40 cases were diagnosed in this decade of life. Our youngest male patient was 23 at the time of diagnosis, and our oldest male patient was 68. While our youngest female patient was 25, again, the oldest female patient was 68. The age distribution of our patients is given by the following table:

Age Group	Number of Patients
20 - 29	7 (14%)
30 - 39	5 (13%)
40 - 49	17 (43%)
50 - 59	6 (15%)
60 - 69	5 (13%)

The most common presenting complaint in patients with a chromophobe adenoma is some sort of visual disturbance. The variety of such disturbances is considerable, but the most typical findings are decreased visual acuity and visual field defects associated with elevation of the optic chiasm by the tumor.[2] Twenty-eight of our cases (70%) presented with a visual complaint and some type of abnormal physical finding consistent with increased pressure on the optic chiasm. This figure is somewhat higher than the 60-65% given by Bouchard.

Also higher than Bouchard's figure of 40-50% is the proportion of our patients who presented with the complaint of severe bitemporal and/or frontal headaches. In our material this was 25 of 40 (63%). While less than 16 of 40 of our patients had *both* headaches and visual disturbances at the time of diagnosis, 36 of 40 (90%) had *either* headaches or visual disturbances at the time of diagnosis.

When the classical visual disturbances and bitemporal headaches are found in a patient with an enlarged sella turcica, many physicians feel that the diagnosis of chromophobe adenoma is virtually certain. Although this is certainly not always true, it is true that typical enlargement and erosion of the sella turcica is almost invariably found in patients who have the disease. Bouchard reports that the incidence of typical sellar changes is about 92%. In our material 35 of 40 patients (88%) had such changes.

The only other symptoms and findings that occur with any significant frequency in people with a chromophobe adenoma are those associated with depression of pituitary hormones. The ensuing clinical picture varies from full-blown panhypopituitarism to borderline hypothyroidism with or without evidence of hypoadrenalism, decreased libido or untimely amenhorrhea.[3] In our material 13 of 40 patients (33%) had substantial evidence of decreased thyroid, adrenal, and gonadal function, but only three patients were described as classical cases of panhypopituitarism.

Another complaint that occurred with some frequency was that of emotional change. Three of 40 (7%) showed signs of lethargy, listlessness and depression which led their families to encourage them to seek medical help.

Treatment

Whether radiation was given post-operatively or as the sole method of treatment made relatively little difference in the time-dose relationship. Thirty-six of the 40 patients received at least 3950 rads (measured at the sella) in no less than 29 days. Two patients' treatment was stopped at a lower level because of previous radiation therapy elsewhere. One patient's treatment was abandoned after 12 days in favor of emergency surgery because of rapidly failing vision. One other patient developed total blindness during therapy and received a lower level. The last two patients were the only ones out of 38 (5%) whose condition worsened while receiving radiation therapy.

The maximum dose given to any of our patients was 5675 rads in 55 days. Thirty-four of the 40 patients received between 3950 rads in 29 days and 5000 rads in 43 days. As for technique, 20 of the patients were treated through opposed lateral 5 x 5 cm ports. Nine were treated with 25 mev Betatron x-rays, while 11 were treated with Cobalt 60. Other treatment ports included: one 3 cm circle, eight 5 cm circles, six 6 cm circles, one 4 x 4 cm square and one 5 x 5 cm square. All of the latter were with 25 mev Betatron x-rays. The largest ports were two opposing lateral ports with a field size of 7.5 x 9.0 cm on Cobalt 60.

Results

Bouchard states that the best yardstick by far for evaluating the result of treatment in chromophobe adenomas is the recurrence-free

rate once the tumor growth has been arrested.[1] Survival rates alone are not a good index of the efficacy of treatment since some patients may live for two or three years with uncontrolled disease. To be very meaningful, one should be able to follow a patient for five or more years without recurrence before stating with a high degree of confidence that his chromophobe adenoma is under long-term or permanent control. Most recurrences will be apparent within 6-12 months, however, and very few recurrences will be observed beyond three years after treatment.[1]

By these standards our follow-up is good enough and long enough for us to draw some conclusions regarding the relative merits or efficacy of various treatment plans. We are at present able to discuss with some accuracy our results. Some of our patients have been lost to follow-up (most of them were treated before the present Radiation Center was organized). However, 23 patients have been followed for two or more years after treatment. All of these patients have shown varying degrees of improvement and only two of them who are still living have as yet shown any definite evidence of recurrence. The two recurrences were retreated and have since done well. Twelve of these patients were treated by a combination of surgery and radiation, and there appears to be some discernible difference at this time between them and the 11 who were treated by radiation alone.

Of the 28 patients in the total series treated with Cobalt 60, 20 of 28 (71%) presented initially with visual problems. At the completion of treatment, 16 (80%) had significant if not complete improvement in their visual field defects. Of the 16 who did show improvement, 8 have subsequently died: two from their pituitary tumor; one from aortic aneurysm; four from cardiac disease; and one from adenocarcinoma of the colon. One patient developed cancer of the larynx which has subsequently been treated and is still doing very well.

Of the 12 patients in the total series treated with 25 mev Betatron, 7 of 12 (58%) presented initially with signs of visual deterioration. At the completion of treatment, 4 of 7 (57%) also had significant if not complete improvement in visual fields. Three (43%) of those patients with visual signs had little or no improvement in their visual fields. Of the four who improved, all are alive and well. One patient with visual problems that did not improve has since died of metastatic breast cancer. In those treated by radiation alone, the incidence of recurring headaches is three times higher than in those treated by radiation and surgery together. The incidence of recurring visual problems is two times greater with radiation and surgery than with radiation alone, while the incidence of those patients who have continual need for drug replacement treatment is the same. The headaches experienced are usually severe but of short duration, while the visual problems range from just short periods of decreased visual acuity to a very severe blurring of both eyes up to a week's duration and sometimes permanently.

Discussion

The use of radiation therapy and surgery either together or separately has undergone several changes since 1962. In earlier days surgery alone was the treatment of choice. However, in the past 10 years many operations have been followed by radiation treatment begun usually in the first month post-operatively. Only a few now use radiation treatment alone as the initial treatment.

Post-operative radiation does seem to lower the recurrence rate of chromophobe adenoma. In several series the recurrence rate following surgery alone was 55%, while following post-operative radiation therapy it was around 20%. A similar trend has since been observed by others[1,4,5] since earlier reviews by Henderson, et al.

Emmanuel said that surgery was not indicated if pressure effects were minimal, if the tumor was too large, or if the general condition of the patient indicated a poor operative risk.[6] Chang and Pool recommended radiation treatment as the treatment of choice unless the patient's vision was badly compromised or if the tumor was large and cystic, although there is a 2-5% chance of erroneous diagnosis on clinical appearance alone.[7] Kramer not only stressed biopsy to rule out other lesions, but also to evacuate cysts if found during the procedure.[8]

Sheline, et al., observed that radiation treatment alone fails to control cystic lesions, citing the uncertainty of diagnosis and slower response with this method. Surgery is recom-

mended if there is a doubtful diagnosis, if visual field defects are extensive, or if hemorrhage is suspected.[5]

Conclusion

Radiation treatment, carefully planned and executed, is a safe and effective adjunct to surgery for the treatment of chromophobe adenoma. Radiation treatment alone can achieve good results in those patients found unsuitable for surgery for various reasons. However, it has been our experience that surgery combined with post-operative radiation treatment is the most satisfactory treatment. We know that radiation treatment can be effective in a great number of these cases in restoring and preserving vision, perhaps as well as surgery, though this is doubtful. Radiotherapy is also of doubtful value where cystic, hemorrhagic or degenerative changes are present. Also, response to radiation treatment, if measured by degree of visual improvement, may take several months to become manifest.

Since visual symptoms and defects are the result of pressure from tumor or cystic change, or hemorrhage into tumor, it is therefore logical that the best way of relieving pressure quickly and obtaining maximal recovery is surgical decompression, with radiotherapy used as a strong adjunct to serve both as an additional treatment of any remaining primary tumor and as a guarantee against recurrence.

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A Case of Meningitis Admitted as Schizophrenia

Nat H. Sandler, M.D.*

Lexington, Kentucky

Acute infectious meningitis could be confused with an acute functional psychosis. The importance of being aware of a cerebral infection as the etiology is discussed and a case is reviewed.

PATIENTS whose major complaint is disturbed psychotic behavior are often brought to admitting rooms. They show no fever, nuchal rigidity or other classic signs of meningitis. It is rare for an acute psychotic process to be the first sign of meningitis.[5] Such disturbed patients are referred to the psychiatric service and a diagnosis of acute meningitis is often not considered initially. Earlier writers, such as Osler, emphasized the mental symptoms of meningococcal meningitis.[4] Today, because meningitis is not as commonly seen, a physician on an admitting service might not consider this diagnosis unless fever, rash or signs of meningeal irritation are present. The patient reported below was admitted as an acute schizophrenic reaction and cerebral infection was not considered until fever and signs of meningeal irritation appeared. Within 24 hours, his diagnosis was changed to acute brain syndrome, associated with intercranial infection. In a five-year period, he was the only patient admitted to the psychiatric service of the treating hospital with this diagnosis. There were 10,773 admissions during this period.

Case Report

A 22-year-old white male was brought to the emergency room of a general hospital. There, he became very abusive and threatened to "tear up" the emergency room. The history obtained from his wife revealed that the previous day the patient had complained of severe headaches. His wife called the family physician who saw him in his office and treated him with an IM analgesic injection. The patient returned home where he still complained of a headache and then began to scream and attack his wife and children. His wife summoned the fire department, who brought the patient to the hospital.

Physical examination on admission showed a well-developed, well-nourished, adult male, who was perspiring profusely. His respiration rate was 30, his temperature 100° and his pulse was 77. No nuchal rigidity was noted. The patient was yelling and incoherent. After a psychiatric consultation was held, the patient was given 100 mg chlorpromazine, IM, and admitted to the psychiatric service with a diagnosis of acute psychosis. On the ward, the patient became somnolent. He responded to verbal and painful stimuli but would not answer questions. Within 24 hours, the patient began to show nuchal rigidity and some pain when his neck was moved. His temperature rose to 102.2°. Pupils became pinpoint. He was transferred back to the medical service with a diagnosis of probable meningitis. His examination there showed a mild erythema of the throat with exudate over the uvula. Tachycardia was present. There were marked contractures of the paraspinal muscles with a stiff back. The neurological examination revealed hyperactive deep tendon reflexes, clouded sensorium, positive Kernig's sign and a positive Brudzinski's sign. A lumbar puncture revealed an opening pressure of 310 mm of H_2O and a closing pressure of 205 mm. The fluid was cloudy with a cell count of 19,000 with 100% polymorphonuclears. A smear revealed no organisms.

The patient was placed on triple therapy with penicillin, chloromycetin and sulfonamide intravenously. A culture was reported as growing *Neisseria meningitidis*. The leukocyte count was 15,800, with 86% polymorphonuclears, and a sedimentation rate of 48 mm. The hospital course was uneventful. The patient re-

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sponded readily to treatment and, after three days, was perfectly lucid, afebrile and coherent. He remembered nothing of the violent episode with his wife and children. The patient was released two weeks after admission. On the day after discharge, he developed difficulty in blinking his right eye and was readmitted to the hospital four days later. He had peripheral facial nerve paralysis on the right side. He remained in the hospital for four days. He was seen in the neurology clinic one week after discharge and showed only minimal right-sided facial weakness. It was felt that this was a residual of the meningitis. Follow-up one year later revealed the patient to be doing well with no acute psychiatric or neurological problems.

Comments

Schizophrenic reactions may be confused with acute brain syndromes. In acute schizophrenic excitement, in which the patient has been heavily sedated, the diagnosis may be difficult.[3] Our patient received a large dose of chlorpromazine on admission.

A few hours' delay in the diagnosis may make a great deal of difference in the progress of acute infectious meningitis. Patients who appear psychotic may be showing an early sign of meningitis. The psychiatric symptoms often tend to be mild and do not usually appear until later in the course of the disease.[1] For this reason the diagnosis of meningitis is not usually considered unless other signs are present. Psychiatric symptoms, however, can occur initially. Psychotic behavior as a presenting sign of meningitis is probably more common than generally appreciated today.[2] The diagnosis of meningitis should always be kept in mind when a disturbed patient is first seen. An early diagnosis of meningitis can often mean the difference between no residual effects and chronic neurological defects. It may even be the difference between life and death.

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CORRECTIONS

Results of Gram Stain. — In the article, "Ampicillin-Resistant Hemophilus Influenzae: Complacency Ends," published in the December, 1974, issue (12: 655-657), the third sentence under the heading "2.b." on page 656 should read as follows: "At this time, Gram stain of the direct smear of the CSF should show a *definite decrease in the numbers* **of** *organisms present,* regardless of the cellular and chemical changes."

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Pleural Thickening Simulating Intrathoracic Tumor —Case Report

ABDU DAHHAN, M.D.*
Harlan, Kentucky

Pleural thickening is a frequent finding in chest x-rays of asymptomatic individuals. However, it is unusual for it to simulate a pulmonary neoplasm suggesting bronchogenic carcinoma. A case is presented with a brief review of pleural thickening and intrapleural fluid "pseudo-tumor".

GORDON and Gilchrist in 1964[1] reported five cases of pleural thickening presented as simulating pulmonary infiltrate. The purpose of this communication is to describe a similar case, adding another possibility to the list of differential diagnoses of these shadows. The incidence of such shadows should be increased in the coming years in view of the wide-spread use of routine chest x-rays.

Case Report

A 46-year-old male was referred to Will Rogers Hospital, Saranac Lake, New York, for evaluation of an abnormal chest x-ray discovered in June, 1972, on a pre-employment examination (Figs. 1A, 1B). He had not previously had an x-ray of his chest since 1945 and that film could not be located. He had smoked a pack of cigarettes a day since the age of 18; however, he denied any symptoms. The only pertinent information, in addition to his smoking habit, was a history of moderate drinking (one to three shots of whiskey per night) for the past 20 years. He worked as a stage doorman for 20 years.

Physical examination revealed the following positive findings: scattered expiratory rhonchi in both lungs; a palpable, soft, non-tender mass in the epigastrium suggestive of the left lobe

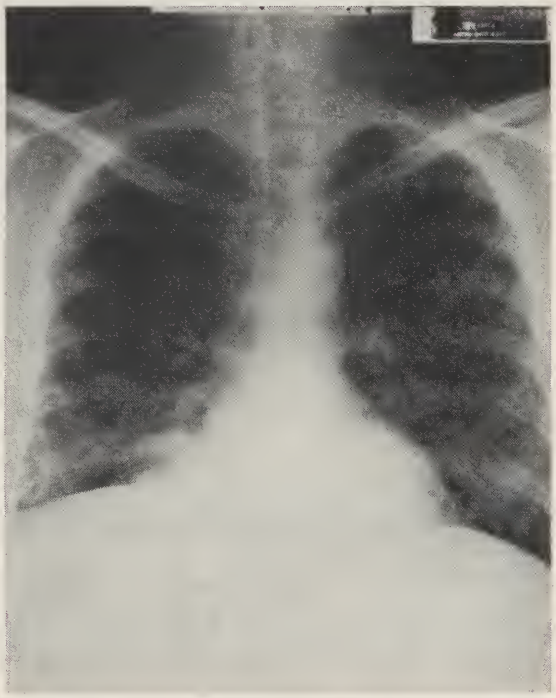


FIG. 1A

of the liver and extending four cm below the xyphoid area. Chest x-ray obtained in September, 1972, (Figs. 2A, 2B) raised the question of increasing size of the density. The impression was that of a lung tumor, malignant, with liver metastases. His laboratory data showed the following abnormalities: total bilirubin, 3.6 mg with 0.6 mg direct; prothrombin time, 15.7 seconds with a control of 11.7, and after the administration of vitamin K, this improved to 13.9 seconds with a control of 11.8; positive skin test with 5 TU Manteaux; and sputum, negative for malignant cells and A.F.B. on smear.

Pulmonary function studies revealed minimum reduction in the air flow studies. Lung volumes and diffusing capacity were normal. Arterial blood gases revealed a pO_2 of 66 mg/Hg, while pCO_2 and pH were normal. Bronchoscopy was negative. Post-bronchoscopy sputum specimens were negative for malignant

*Daniel Boone Clinic, Harlan

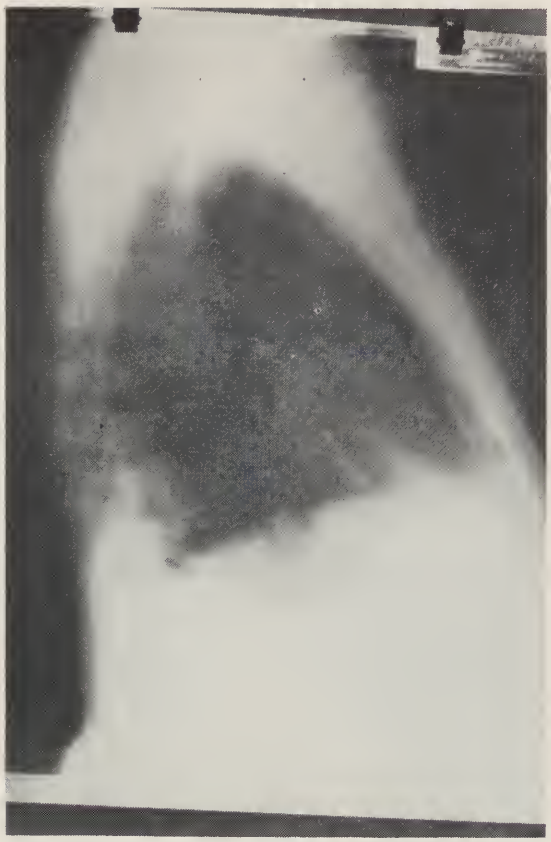


FIG. 1B

cells. Liver scan revealed an enlarged liver, especially on the left lobe, with a large non-radioactive area in the mid-portion of the liver. The scan was felt to be consistent with metastatic disease. An open liver biopsy was performed. On exploration, the liver was enlarged and no discrete tumor or nodes were palpable. Biopsy revealed active portal cirrhosis with no evidence of malignancy. This suggested that the patient might have an operable tumor. Right thoracotomy was performed and no tumor was found. The right pleural cavity was completely obliterated by thick dense adhesions. The right lower lobe was contracted by thick adhesions on its pleural surface. Decortication was done and the lobe expanded, indicating no obstruction. Examination of the stripped pleura revealed chronic fibrous pleuritis; no granulomas were seen. Stains for AFB, fungi and asbestos bodies were negative on the stripped pleura and the fragments of lung underneath.

His post-operative course was uneventful. Follow-up chest film showed disappearance of the previously seen density (Figs. 3A, 3B). On subsequent questioning, the patient denied chest trauma or any history suggestive of pneumonia, pleurisy or pulmonary emboli. The etiology of his pleuritis is unknown.

Discussion

This case is unusual in that pleural thickening simulated a parenchymal lung tumor, and hepatomegaly due to cirrhosis initially suggested metastasis.

The term pseudo-tumor is used to describe a collection of fluid in the pleural tissue secondary to congestive heart failure. This disappears after treatment of the failure.[2-7] Felson[8] described pleural thickening and estimated its presence as 1.2% on 500 x-rays reviewed in a study of army inductees. However, none of these presented in a fashion to be confused with pulmonary tumor. Fraser[9] described pleural thickening, especially of the apical pleura (pleural cap), and it is sometimes confused with apical pulmonary cancer or pulmonary infiltration secondary to tuberculosis. Sciammas and his associates[10] described multiple pleural nodules in a 45-year-old asymptomatic man; however, the patient was exposed to asbestos and it was felt that his pleural nodules were secondary to his asbestos exposure while there is no such history in our patient nor pathologic evidence of such.

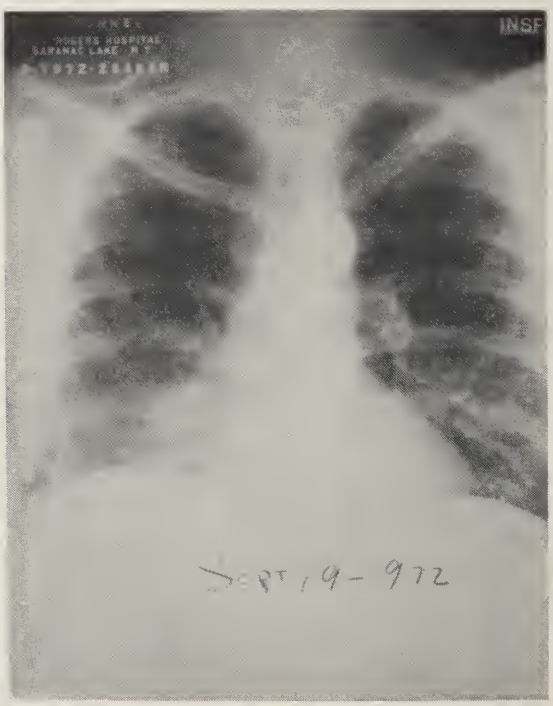


FIG. 2A



FIG. 2B

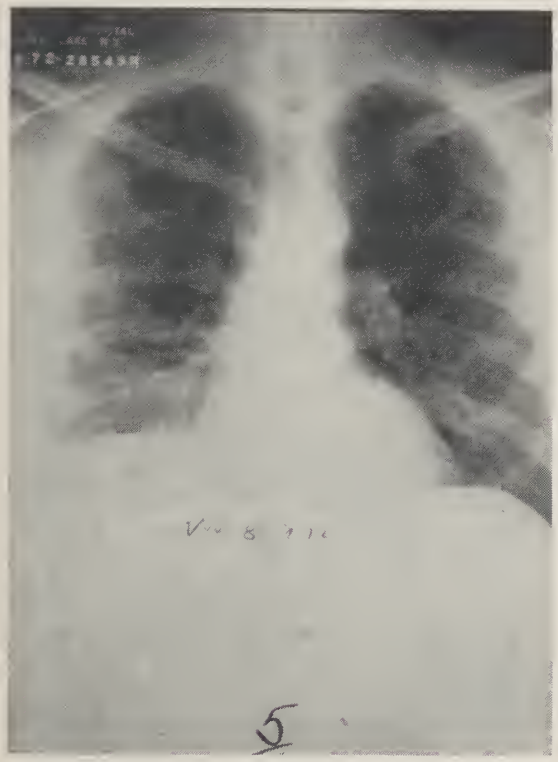


FIG. 3A

In conclusion, localized pleural thickening should be considered in the differential diagnosis of parenchymal lung infiltrates despite its infrequency.



FIG. 3B

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GRAND ROUNDS

The University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Laryngotracheal Trauma

LARRY D. FLORMAN, M.D.
LEONARD J. WEINER, M.D.

TRAUMATIC laryngotracheal disruption, although not common, is frequently fatal, as the victims often die before diagnosis can be established. Indeed, laryngotracheal trauma is the second most frequent cause of death resulting from auto accidents, surpassed only by intracranial injuries. Injuries to the larynx and trachea require an immediate and accurate diagnosis, early repair and long-term follow-up.

Laryngotracheal injury in a high-speed automobile collision usually results from the anterior portion of the extended neck hitting the dashboard, while the head strikes the windshield. The supportive muscular sling pulls the larynx upward, as the force of impact divides the airway and pushes the trachea downward. It is not uncommon to find the severed trachea dislocated to a retrosternal position.

Injury to adjacent neck structures is the rule rather than the exception, and careful examination of the recurrent laryngeal nerves, carotid and jugular vessels, esophagus, and cervical spine must be made. In the majority of cases, injury to other parts of the body accompanies laryngotracheal trauma, thereby necessitating thorough evaluation of the chest for conditions such as pneumothorax or hemothorax, the abdomen for internal injuries, the extremities for fractures, and the cranium for cerebral injury.

From the Department of Surgery, University of Louisville School of Medicine, Louisville.

Case Presentation

A 21-year-old passenger sitting in the front seat of a sports car was the victim of a high speed-sudden deceleration, dashboard injury to the neck. On arrival at the hospital, the patient's breathing was stridulous and a bruise was noted over the anterior neck. Numerous facial lacerations were present. Oral-tracheal intubation was attempted, resulting in the complete obstruction of the upper airway. An incision was immediately made 3 cm above the sternal notch, giving access to the completely-severed distal end of the trachea which was discovered behind the manubrium of the sternum. An endotracheal tube was inserted into the distal trachea for resuscitation and induction of anesthesia. Neck exploration was performed by extending the original incision. Complete disruption of the first tracheal ring from the cricoid cartilage was noted, together with severance of all the strap muscles, both recurrent laryngeal nerves, and the sternocleidomastoid muscles. The cricoid cartilage was comminuted and displaced. Reconstruction of the airway was accomplished by reduction of the cricoid fractures and end-to-end anastomosis. A low tracheostomy was performed. The immediate life-saving procedure was successful, but the upper airway remained obstructed because of bilateral recurrent nerve paralysis and vocal cord adduction towards the midline.

Ten weeks after injury, an arytenoidopexy was performed with lateralization of the right

vocal cord. Subsequently, the glottis remained adequate, the voice was well modulated, and the patient was able to carry out his daily activities with the tracheostomy tube plugged.

In the weeks that followed, it became evident that the airway was once again obstructed. Direct laryngoscopy and a laryngotracheogram confirmed the suspected presence of stenosis at the level of the original repair. The stenotic cricoid area was excised, and the trachea anastomosed to the thyroid carttilage. In an effort to create less tension on the suture line, a release of the larynx was affected by a laryngeal drop procedure in which the muscles which suspend the larynx from the hyoid bone, tongue, and mandible were divided. A Silastic stent was placed in the lumen of the reconstructed area and left in place for nine weeks.

Diagnosis

When laryngotracheal injury has occurred, the following signs and symptoms will be found; they may occur in any combination and to any degree. They indicate the necessity for further clinical evaluation.

1. **Loss of palpable and visible landmarks** is a pathognomonic sign of fracture of the cricothyroid complex.

2. **Subcutaneous emphysema** as the result of a mucosal tear is often associated with a fractured cartilage. This sign must be differentiated from subcutaneous emphysema secondary to pneumothorax.

3. **Aphonia or hoarseness** may be caused by edema of the larynx but is usually the result of fracture of the thyroid or cricoid cartilage,with loss of vocal cord support.

4. **Airway obstruction** may be secondary to fracture, edema, hematoma, or dislocation of an arytenoid cartilage.

5. **Hemoptysis** is usually attributable to mucosal laceration.

6. **Persistent pain** on swallowing or on palpation, even long after the initial injury, usually indicates an overlooked or untreated fracture.

The methods of evaluating signs and symptoms should include the following:

1. *History* of impact.

2. *Observation* of respiratory distress.

3. *Inspection* of the neck, noting any contusions, abrasions, hematomas, subcutaneous emphysema, or penetrating wounds.

4. *Palpation* of anatomic structures and determination of continuity.

5. *Indirect laryngoscopy* which can often be performed in the acute phase.

6. *Direct laryngoscopy* with a detailed description of the injury done before any reconstructive surgery. Fractures of the larynx and cricoid may be apparent and immobility of the vocal cords discerned. During the acute phase, this examination will often preclude further surgical intervention. Endolaryngeal hematomas and dislocated arytenoids can often be corrected during this procedure. Bronchoscopy and esophagoscopy are performed as may be required.

7. *Chest x-ray*. Pneumothorax and pulmonary contusion are frequent concurrent findings.

8. *Soft tissue x-ray of the neck and tomograms*. Complete evulsion of the trachea from the larynx may show an interruption of the air column.

9. *Contrast studies* of the upper airway are probably contraindicated during the acute phase but are useful in the chronic phase and before reconstructive procedures.

Treatment

Operative Repair

Lower tracheostomy is performed for preservation of life with airway disruption and also before any open reduction of cartilage fractures. Even simple fixation of these fractures can cause significant mucosal edema. Because laryngeal mucosa is normally quite adherent to the perichondrium of the thyroid cartilages, the presence of subcutaneous emphysema usually indicates a cartilage fracture. Thus, any subcutaneous emphysema associated with this injury (except that resulting from pneumothorax) is an indication for tracheostomy, as these patients will require an open neck exploration. Significant airway obstruction should be treated by tracheostomy, not by peroral intubation, as this will only further traumatize the already injured airway.

With laryngotracheal disruption, repair is by meticulous approximation of the severed ends without tension. Mucosal approximation must be very accurate and the cartilage repair of sufficient tensile strength. Scar formation is inevitable and may lead to stenosis. Many authorities advocate insertion of an internal stent of relatively non-reactive material for extended periods to influence the physical con-

formity of the scar, and thereby prevent airway stenosis.

We advocate laryngotracheal repair as soon as possible after injury, rather than immediate tracheostomy followed by laryngotracheal reconstruction a week later. If a major objective is to minimize scar formation, it would seem desirable to afford repair early on, rather than during the height of inflammatory and fibroblastic responses.

Use of antibiotic therapy is suggested in laryngeal fractures or disruptions, as these injuries are in fact compounded to the airway which may serve as a source of contamination to the soft tissues of the neck.

Follow-Up

Close, prolonged follow-up of patients who have sustained laryngotracheal trauma is essential, because the most frequent, serious complication, stenosis of the airway at the level of injury, may present up to many months after initial injury.

Despite all attempts of prevention, airway obstruction after initial repair frequently occurs, along with voice difficulties. Wounds beget scar tissue and, depending upon certain internal and external influences, a scar may remodel into a stricture.

Subglottic stenosis is best managed in the case of bilateral recurrent laryngeal nerve loss by excision of the stenotic area and primary repair (with or without a stent) along with a suprahyoid or infrahyoid laryngeal release. The release allows a tension-free anastomosis. If additional length is needed, the distal trachea may be mobilized.

When the recurrent nerves are intact, all attempts should be made to preserve the cricoid arch. Subglottic stenosis in this situation may be treated by excision, skin grafts over denuded cartilage, grafts of bone, or cartilage to the cricoid arch, and internal stenting. Laryngeal release is an important element to reconstruction in this situation also.

Airway obstruction caused by bilaterally adducted vocal cords is best treated by an arytenoidopexy and cord lateralization.

With increased awareness in diagnosis, together with immediate definitive repair of the laryngotracheal injuries according to sound biologic principles, we should see fewer complications in the acute and chronic management of this entity.

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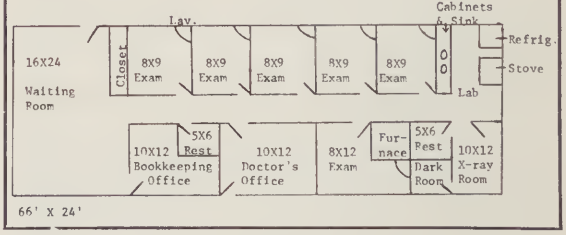
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MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

CASE 13-71. This 38-year-old white G ?, P ?, was dead on arrival at the hospital emergency room on July 23, 1971. She was involved in an automobile accident three weeks earlier, and had seen a physician. The history at the time was that she fell to the floor as though dizzy while sitting at the table eating.

An autopsy was performed; she was pregnant approximately 12 weeks. The physician who performed the autopsy said there was a question of an attempted abortion. A piece of amorphous material-like gel foam was found inside the uterus. The cervix was not traumatized. The organs weren't opened under water.

The summary stated the patient died of an air embolism secondary to an abruptio placenta. Although air embolism was not proven at autopsy, there was much foamy blood when the pulmonary artery was opened. The petechial hemorrhages in the myocardium suggested asphyxia.

Comments

This was classified as a probable direct obstetric death with preventable factors. The Committee considered the possibility of an air embolism resulting from or produced by forcing air into the vagina to produce an abortion. Fatal cases of air embolism due to forcing air into the vagina by various means have been reported by paramours. A case was reported by Munsick, R. A., (*Obst. & Gynec.* 39, 688, 1972) in which death occurred from air embolism during the performance of a therapeutic abortion. In this instance misconnection of the tubing caused air to be introduced into the uterus and subsequently the systemic circulation.

Kentucky MECO 1975

After another successful summer in 1974, the Kentucky MECO (Medical Education, Community Orientation) Program will be placing medical students into community hospital or clinic settings again this coming year. Last summer, the Kentucky MECO program placed 88 students in 21 more communities than in 1973. The 1975 MECO program has already begun, with the expectation that its quality and ability to effectively place students from the University of Kentucky and the University of Louisville will continue to improve.

The MECO Program is a preceptorship-type program which allows medical students to spend 8-10 weeks during the summer learning about a community's total health care system. MECO allows the students and participating physicians to mold an educational experience to best fit each community setting. All facets of the community as they relate to health care are stressed, from the hospital environment to the physician's life style in the community.

The physician is reminded that s/he may earn up to 30 hours continuing education from the AAFP. UL students, and perhaps in the near future UK students, can earn academic (elective) credit for participating in this medical education program. With the cooperation of each of the state's medical schools, the Kentucky Hospital Association, Kentucky Blue Cross and Blue Shield, Jefferson County Medical Society, Fayette County Medical Society, and the Kentucky Academy of Family Physicians, the MECO Program is accepting applications from physicians, clinics and hospitals for the coming year.

Anyone desiring to participate or wanting more information should contact: Mr. Phil Aaron, Kentucky MECO Director, 1415 St. Anthony Place, Louisville 40204, or Mr. Robert Thompson, P.O. Box 191, UKMC, Lexington 40506.

EDITORIAL

Prescription Problems

TO prescribe is to order or recommend the use of a drug or other therapy. In ordering a drug there is the act of prescription writing which involves many, great and varied problems. These problems are receiving publicity aplenty in lay and medical press, with the entire field covered interestingly and well in the University of California Press book, *Pills, Profits, and Politics,* by Milton Silverman and Philip R. Lee. The emphasis is on miracle drugs, adverse drug reactions, irrational and unnecessary prescribing, prescription costs and drug industry profits, drug abuse, brand name products versus generic products, over-the-counter medicines, and placebos.

Figures emphasize the magnitude of the problem: approximately 1500 million prescriptions come from retail outlets annually and 1000 million from hospital pharmacies. These problems will increase since one-fourth of all out-of-hospital prescriptions are used by the senior citizen group, the group whose numbers have increased more than 200% in the past 40 years and continue to increase.

To avoid some problems, prescription pads should not be easily accessible to patients, as the addict may use them for forgeries. For the same and other reasons, the use of the rubber stamp and signature imprint on prescription pads is condemned. Prescriptions written with a lead pencil are easily altered and, in ordering narcotics, the use of numerals of quantity should be avoided in favor of spelling out the units to be dispensed. Officials of the Drug Enforcement Administration caution that addicts may not be given prescriptions for the purpose of "detoxification" nor "maintenance" treatment. No one can authorize a physician to give an addict a narcotic prescription, but narcotics may be prescribed for patients with intractable pain and incurable disease.

To prepare perfect prescriptions, the American Society of Internal Medicines suggests the following 10 guidelines:

1. The name and strength of the drug dispensed will be recorded on the prescription label by the pharmacist unless otherwise directed by the prescriber.
2. Whenever possible, specific times of the day for drug administration should be indicated. (For example, "Take one capsule at 8:00 a.m., 12:00 noon, and 8:00 p.m." is preferable to "Take one capsule three times daily." Likewise, "Take one tablet two hours after meals" is prefferable to "Take one tablet after meals.")
3. The use of potentially confusing abbreviations, i.e., qid, qod, qd, etc., is discouraged.
4. Vague instructions such as "Take when necessary" or "Take as directed," which may be confusing to the patient, are to be avoided.
5. If dosing at specific intervals around-the-clock is therapeutically important, this should specifically be stated on the prescription by indicating appropriate times for drug administration.
6. The symptom, indication, or the intended effect for which the drug is being used should be included in the instructions whenever possible. (For example, "Take one tablet at 8:00 a.m. and 8:00 p.m. for high blood pressure," or "Take one teaspoonful at 8:00 a.m., 3:00 p.m. and 6:00 p.m. for cough.")
7. The Metric System of weights and measures should be used.
8. The prescription order should indicate whether or not the prescription should be renewed and, if so, the number of times or the period of time such renewal is authorized. Statements such as "Refill prn" or "Refill ad lib" are discouraged.
9. A separate prescription blank should be used for each drug prescribed.
10. When institutional prescription blanks are used, the prescriber should print his/her name, telephone number, and registration number on the prescription blank.

JSL

NEEDED BY OUR MEDICAL SCHOOLS

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Our medical schools need flexible financial aid — the kind that the American Medical Association Education and Research Foundation funds provide. Medical schools receive AMA-ERF money WITHOUT STRINGS ATTACHED. Each school may use these funds as it sees fit to solve its most pressing financial problems.

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AMA-ERF DONATION FORM

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Amount of gift: _____

Designated for: ☐ Loan Guarantee Fund

☐ _____ Name of Medical School

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Mail to your county AMA-ERF Auxiliary Chairman or to:
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Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) **Tablets** include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) **for Injection** is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage of SYNTHROID (sodium levothyroxine) may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, such as Addison's Disease (chronic adrenocortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.



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1 *Synthroid* is T4.

2 Because T4 converts to T3 at the cellular level, it provides full thyroid replacement at maintenance doses.[1, 2]

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7 Sodium levothyroxine in *Synthroid* tablets is chemically pure. It does not contain any animal gland parts.

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In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two-month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, U.S.P., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) **for Injection** may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

1. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T_4) to Triiodothyronine (T_3) in Athyreotic Human Subjects, J. Clin. Invest. *49*:855-64, 1970.
2. Surks, M. I., Schadlow, A. R., and Oppenheimer, J. H.: A New Radioimmunoassay for Plasma L-Triiodothyronine: Measurements in Thyroid Disease and in Patients Maintained on Hormonal Replacement. J. Clin. Invest. *51*:3104-13, 1972.

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC.
Deerfield, Illinois 60015

Letters to the Editor

To The Editor:

I read the article "Vinyl Chloride and Angiosarcoma" by Block in the September issue of the *Journal of the Kentucky Medical Association* beginning on page 483. I have a patient who has been diagnosed as having this and it is more than a passing interest. I am afraid the article left me more confused after I read it than before.

One problem seems to be that the author switched subjects from carcinoma of the liver to angiosarcoma of the liver ad lib and I never knew exactly what he was talking about. On page 484 he stated that two-thirds of all carcinomas of the liver are characterized by indefinite abdominal symptoms usually attributed to gastric disturbances. He does not make it clear whether this is true for angiosarcoma or not.

He also mentions a vascular hum over the hepatic region. Is this true of angiosarcoma also, and could I get a reference on this? In the laboratory data on page 484 I assume that he is talking again about primary carcinoma of the liver. He does not make it clear whether this is true for angiosarcoma or whether this was just some information thrown in. He states also on page 484 that surgical biopsies and percutaneous needle biopsies are contraindicated where angiosarcoma is suspected because of the vascular nature of this tumor. I was not aware that this tumor did have a vascular nature and that there was a possibility of exsanguinating hemorrhage. He reaffirmed this on page 485 in the summary where he said biopsy is contraindicated, and then stated angiosarcoma of the liver can be cured only by surgical excision. I have two questions here. (1) Does the author recommend surgical excision of the liver without benefit of biopsy? (2) What is the cure rate of resection of the liver for angiosarcoma? I would like to get the reference on this, as I may want to look it up myself. He also states radiation therapy and chemotherapy are of palliative value only and do not significantly prolong survival time. I would like a reference on this also.

Finally, on page 483 he states that the diagnosis of angiosarcoma of the seven cases among vinyl chloride workers at the Louisville B. F. Goodrich Plant was made after reviewing autopsy materials. I know there are two patients who are still alive and I was wondering if he recommended autopsy prior to death.

In summary, I think this is one of the worst and most confusing articles I have ever read. Practically the entire article was about carcinoma of the liver and whether the clinical findings, diagnosis, treatment, prognosis, etc., were appropriate to angiosarcoma of the liver was left completely in doubt.

Robert E. Arnold, M.D.
Suburban Medical Plaza
Suite 7-D
Louisville, Kentucky 40207

To The Editor:

In response to Doctor Robert E. Arnold's justifiable criticism of my article, I would like to attempt to eliminate some of the confusion.

I would first like to point out that the article was written nearly a year ago and much new knowledge of angiosarcoma of the liver has been developed since that time. We have learned more in the past six months than in the past 60 years. At the time the article was written, there were five cases reported from Louisville and, in an attempt to update the article to include the more recent cases, an error was made in editing.

The National Institute of Health obviously reviewed only five cases of autopsy material. The other cases were confirmed by biopsy specimens. Concerning biopsy, open or surgical biopsy is not contraindicated. However, many authors feel that the percutaneous needle biopsy is a most hazardous procedure in these cases and, if not contraindicated, should be approached with great caution.

Concerning the indefinite abdominal symptoms described, it has also been noted in several, but not all, of the angiosarcoma cases. The vascular hum as reported by Hastings-James was not reported in other articles nor was it present in the Louisville cases. To date no characteristic laboratory picture of angiosarcoma of the liver has been developed. However, at the time of the writing of this article, there appeared to be some indication that the laboratory data would be similar to that of primary carcinomas of the liver.

Concerning radiation and chemotherapy, at the time the article was written the statements, to the best of my knowledge, were correct. However, in light of new developments, it appears that chemotherapy may be of some value. One of the Louisville cases has shown significant improvement if not a "cure" as a result of chemotherapy.

Concerning a request for information for a cure rate, the number of cases has been so small and so scattered that no reliable data is available. Most of the cures reported have been in infants operated upon before the age of one year.

I wish to take this opportunity to thank Doctor Arnold for his review of this article. I hope that this letter will in some way eliminate some of the confusion surrounding this subject. At the rate new information is being developed on angiosarcoma of the liver, all that we say here may be meaningless within a year.

J. Bradford Block, M.D.
Kentucky Department of Labor
Frankfort, Kentucky 40601

1974 CONSTITUTION AND BYLAWS
OF THE
KENTUCKY MEDICAL ASSOCIATION

Revised September 25, 1974

CONSTITUTION

Article I.	Name of the Association
Article II.	Purpose of the Association
Article III.	Component Societies
Article IV.	Composition and Meetings of the Association
Article V.	Officers
Article VI.	House of Delegates
Article VII.	Districts, Sections and District Societies
Article VIII.	Board of Trustees
Article IX.	Funds and Expenses
Article X.	Referendum
Article XI.	The Seal
Article XII.	Amendments
Article XIII.	Definitions

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Article V. Officers

Section 1. The officers of this Association shall be a President, a President-elect, a Vice President, a Secretary, a Treasurer, a Speaker and Vice Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component societies in such manner as may be provided in the bylaws. Officers of the Association, Delegates and Alternate Delegates to the American Medical Association, and the five immediate Past Presidents shall be ex officio members of the House of Delegates and entitled to vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem

appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

Chapter I. Membership
Chapter II. Annual and Special Meetings of the Association
Chapter III. The House of Delegates
Chapter IV. Election of Officers
Chapter V. Duties of Officers
Chapter VI. Board of Trustees
Chapter VII. Discipline—The Judicial Council
Chapter VIII. Standing Committees and Councils
Chapter IX. Assessments and Expenditures
Chapter X. Rules of Conduct
Chapter XI. Rules of Order
Chapter XII. County Societies
Chapter XIII. Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Section 2. Membership in the Association shall be divided into nine classes, to-wit: Active, Emeritus, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) Emeritus Members. Component societies may elect as a member-emeritus any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Emeritus members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) In-Training Members. Interns, residents, and teaching fellows who are doctors of medicine or osteopathy and who have complied with all pertinent regulations of the State Board of Health. In-training members shall have the right to vote and receive all publications of the Association, but shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates.

(d) Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State.

(2) Osteopathic physicians who practice allopathic medicine.

Associate members shall not have the right to vote nor to hold office, but shall receive the Journal and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive the Journal and other publications of the Association.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. Student members shall not have the right to vote nor hold office. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from January 1 to December 31 of each year. Student members may not hold office but may be voting members of any committee to which they are appointed. They will be represented in the House of Delegates through one voting representative, a student member of KMA elected by the student body at the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the student body at the University of Louisville School of Medicine.

(g) Service Members. Members of the Association in good standing who enter military service and are ineligible for Associate membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite dentists, pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 4. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of delegates representing fifty or more component societies. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the Constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary following its introduction. If the author be an individual member, it shall be signed by him. If the author be a group of members, it shall be signed by the authorized spokesman for that group. Immediately after the Delegate has introduced the Resolution, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice-President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected for terms of two years. The Speaker of the House of Delegates, the Vice Speaker, the Secretary, and the Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary or Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice President, Speaker or Vice Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member may make known his availability for any office within the gift of the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well-publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom

and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary shall advise the Executive Director in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees.

Section 8. The Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Secretary or the Executive Director and shall be countersigned by the Treasurer of the Association. Under unusual circumstances, when one or more of the above-named officials are not readily available, the President or the Chairman of the Board of Trustees is authorized to sign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a counter-signature. All five officials shall be required to give bond in an amount to be determined by the Board of Trustees. The Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary, the Treasurer, and the Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice President, the President-Elect, the Secretary, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two trustees to be elected annually by the Board of Trustees. A majority of the full Board, to-wit, 14, and a majority of the full Executive Committee, to-wit, 4, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Treasurer upon a proper itemized statement, but this shall not be construed to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

Section 5. The Journal of the Kentucky Medical Association shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the Journal shall be elected by the Board. All money received by the Journal or by any member of its staff on its behalf, shall be paid to the Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary acting under the general direction of the Executive Committee. In addition. the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Director whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Director shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE — THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or as Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary, shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or

district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In the case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation, the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable the Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recomendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

Section 10. No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judicial Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary, ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Members, $130; (2) Emeritus Members, no dues; (3) Associate Members, $25; (4) In-Training Members, $25; (5) Inactive Members, $25; (6) Student Members, $10; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on

the basis of the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association as of the first day of January each year.

Section 2. Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in the latest edition of Sturgis' Standard Code of Parliamentary Procedure, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 4. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolutions, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 12 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

Section 5. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter I, Section 2 of these Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 6. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 7. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 8. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 9. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw,

rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

Section 10. Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 11. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

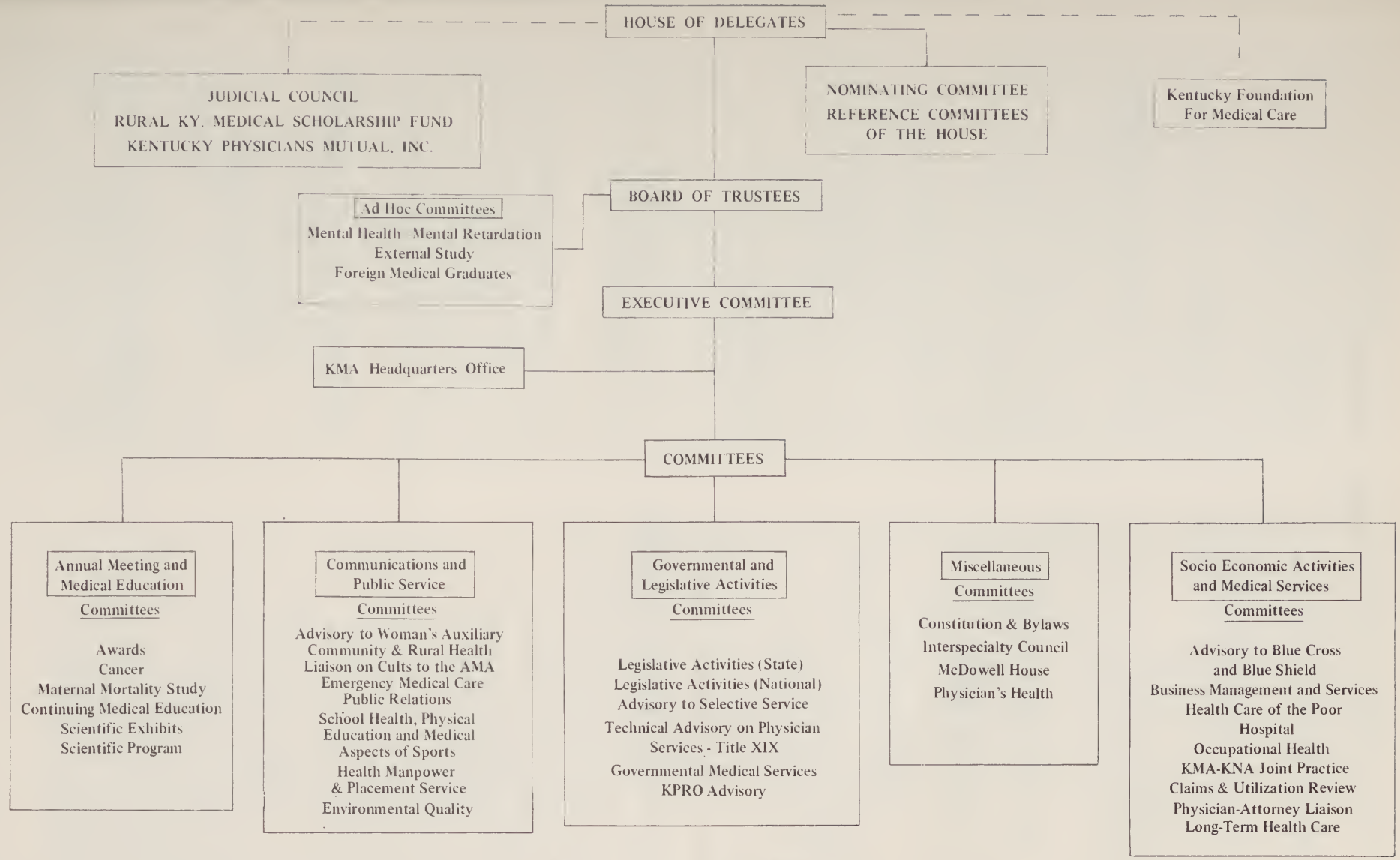
Section 12. The secretary of each component society shall keep a roster of its members and a list of non-affiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary of the Association, on the first day of January of each year, or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

CHAPTER XIII. AMENDMENTS

Section 1. These bylaws may be amended at any session of the House of Delegates by a majority vote of the delegates present at that session, provided: (1) the amendment proposed is presented in writing to the delegates thirty days prior to the session, or, (2) the amendment is introduced in writing at a regular session of the House of Delegates and considered at the following session, the vote on said amendment having been postponed definitely for a period of at least one day.

Section 2. An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final session of the House of Delegates, but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

Section 3. An amendment to these bylaws may be proposed in writing by an individual delegate at the final session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final session is adjourned. Such an amendment having not been postponed definitely for a period of one day, requires a two-thirds vote.



KMA Organization Chart—Revised November 1974

1974-1975 KMA COMMITTEES

ANNUAL MEETING ACTIVITIES

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John L. Duhring, M.D., Lexington
Hoyt D. Gardner, M.D., Louisville
David A. Hull, M.D., Lexington
Nicholas J. Pisacano, M.D., Lexington
Gerald D. Temes, M.D., Louisville

Scientific Exhibits Committee

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Frank R. Lemon, M.D., Lexington
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Ex-Officio:

Charles E. Tucker, MPH
Jean Younger, R.N.

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Lewis Francis, M.D., Lexington
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Delmas M. Clardy, M.D., Hopkinsville	Surgery
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Representative, University of Louisville SAMA Chapter
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AMA Delegates' Deliberations

The House of Delegates of the AMA met in Portland, Oregon, December 1-4, 1974. From the "Oregon mist," which persisted throughout the meeting, several significant issues emerged. Doctors Tom Giannini, Dave Stevens, Fred Rainey, Charlie Bryant, Tom Heavern, Ben Crowder and Laszlo Makk, with Bob Cox and Jerry Mahoney, represented the KMA. This is our report.

The AMA is not only broke; the AMA has expended all liquid reserves and will need to borrow $3,000,000 to cover operating expenses for the rest of the calendar year. Expenses have exceeded revenue the last five years, revenue from sources other than dues was lower than anticipated, costs of publications and travel is currently up 30% and the stock portfolio reserve, before it was liquidated, had lost appreciable value. In summary, to continue operating immediate cash was needed and the House voted a $60 assessment in 1975 to solve the deficit problem. However, the Delegates did not vote a dues increase, but will consider dues again in June, 1975, at Atlantic City (as related to structure and role of AMA in the medical profession). To say it another way, many Delegates have the impression that the AMA can reduce its programming without losing its effectiveness. If the AMA continues to operate in the same way, all Delegates realized more money will be necessary.

Several years ago, the AMA, in conjunction with state and local medical societies, changed the rules to encourage house staff membership and participation. A small percentage have joined, but many are real firebrands with the ardor and temperament of colonial patriots. It has been refreshing and stimulating, but now the Board of Trustees of the AMA and the Intern-Resident section were at loggerheads. The Delegates value the contribution of the younger physicians, but took action which will hopefully defuse the situation.

Doctor Bert Howard retired this Fall and Doctor Jim Sammons, who has visited in Kentucky at our House of Delegates, is now chief of staff (Executive Vice President). Also, new Trustees, including our KMA President Hoyt Gardner, are serving on the AMA Board. It would seem that a little time will be necessary before the transition can be achieved and firm leadership is re-established.

All Delegates and Alternates solicit your views and comments. Your attention is directed to the remarks of Vice President Makk in this *Journal*.

Delegates	DBS Telephone No.
J. Thomas Giannini, M.D., Louisville	502/895-5466
Fred C. Rainey, M.D., Elizabethtown	502/765-4147
David B. Stevens, M.D., Lexington	606/278-3481
Alternate Delegates	
Charles G. Bryant, M.D., Louisville	502/452-1558
William W. Hall, M.D., Owensboro	502/684-6255
Thomas L. Heavern, Jr., M.D., Highland Heights	606/441-7600



A half-ounce of prevention

Use it to prevent a topical infection. Or to treat one that's already started. In either case, it's good medicine. Whether for lacerations, burns, open wounds, IV catheter or surgical aftercare. Neosporin® Ointment provides broad antibacterial coverage against common susceptible pathogens. And since it contains three antibiotics that are rarely used systemically, the risk of sensitization is reduced. Neosporin Ointment. A half-ounce of prevention. Also available in a full ounce of prevention and in convenient foil packets.

Neosporin Ointment carried on Apollo and Skylab missions.

Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs.
In tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically,* used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.
Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

Wellcome / **Burroughs Wellcome Co.**
Research Triangle Park
North Carolina 27709

Opinion & Dialogue

The Role of the Detail Man

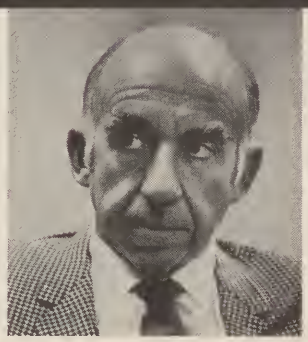


Dr. Willard Gobbell
Family Physician
Encino, California

"I may be prejudiced, but I am very much in favor of the detail men I meet. Most of them are knowledgeable about the drugs they promote and can be a great help in acquainting me with new medication."

Family Physician's Perception

I think that most general practitioners in this area feel as I do about the detail man. Over the years I have gotten to know most of the men who visit me regularly and they in turn have become aware of my particular interests and the nature of my practice. They, therefore, limit their discussion as much as possible to the areas of interest to me. Since I usually see the same representative again in future visits, it is in his best interest to supply me with the most honest, factual, as well as up-to-date information about his products.



Dr. Jeremiah Stamler
Chairman
Department of Community Health and Preventive Medicine, and Dingman Professor of Cardiology
Northwestern University Medical School

"In the total picture of dealing with health problems in this country, there is a potential for detail men to play a meaningful role."

The Positive Influence

My contact with representatives and salesmen of the pharmaceutical industry is the type of contact that people in a medical center, research people, and academic people have and that's in all likelihood on a somewhat different level from that of the practicing physician.

Let me touch on how I personally perceive the role of the sales representative. These men reach large numbers of health professionals. Thus they could be—and at times actually are—disseminators of useful information. They could consistently serve a real educational function in their ability to discuss their products.

At present they do distribute printed material, brochures and pamphlets—some of it scientifically sound and therefore truly useful—as well as some excellent films produced by the pharmaceutical industry. When they function in this

Is He a Source of Information?

Yes, with certain reservations. The average sales representative has a great fund of information about the drug products he is responsible for. He is usually able to answer most questions fully and intelligently. He can also supply reprints of articles that contain a great deal of information. Here, too, I exercise some caution. I usually accept most of the statements and opinions that I find in the papers and studies which come from the larger teaching facilities. It goes without saying that a physician should also rely on other sources for his information on pharmacology.

Training of Sales Representatives

Ideally, a candidate for the position as a sales representative of a pharmaceutical company should be a graduate pharmacist who has a questioning mind. I don't think this is possible in every case, and so it becomes the responsibility of the pharmaceutical company to train these individuals comprehensively. It is of very great importance that the detail man's knowledge of the product he represents be constantly reviewed as well as updated. This phase of the sales representative's education should be a major responsibility of the medical department of the pharmaceutical company.

I am certain that most of these companies take special care to give their detail men a great deal of information about the products they produce—information about indications, contraindications, side effects and precautions. Yet, although most of the detail men are well informed, some, unfortunately, are not. It might be helpful if sales representatives were reassessed every few years to determine whether or not they are able to fulfill their important function. Incidentally, I feel the same way about periodic assessments of everyone in the health care field, whether they be general practitioners, surgeons or salesmen.

Value of Sampling

I personally am in favor of limited sampling. I do not use sampling in order to perform clinical testing of a drug. I feel that drug testing should rightly be left to the pharmacology researcher and to the large teaching institutions where such testing can be done in a controlled environment.

I do not use samples as a "starter dose" for my patients. I do, however, find samples of drugs to be of value in that they permit me to see what the particular medication looks like. I get to see the various forms of the particular medication at first hand, and if it is in a liquid form I take the time to taste it. In that way I am able to give my patients more complete information about the particular medications that I prescribe for them.

---

capacity they are indeed useful; particularly in the fact that they disseminate broadly based educational material and serve not just as "pushers" of their drugs.

The Other Side of the Coin

Obviously, the pharmaceutical companies are not producing all this material as a labor of love—they are in the business of selling products for profit. In this regard the ambitious and improperly motivated sales representative can exert a negative influence on the practicing physician, both by presenting a one-sided picture of his product, and by encouraging the practitioner to depend too heavily on drugs for his total therapy. In these ways, the salesman has often distorted objective reality and undermined his potential role as an educator.

The Industry Responsibility

Since the detail man must be an information resource as well as a representative of his particular pharmaceutical company, he should be carefully selected and thoroughly trained. That training, perforce, must be an ongoing one. There must be a continuing battle within and with the pharmaceutical industry for high quality not only in the selection and training of its sales representatives, but also in the development of all of its promotional and educational material.

The industry must be ready to accept constructive as well as corrective criticism from experts in the field and consumer spokesmen, and be willing to accept independent peer review. The better educated and prepared the salesman is, the more medically accurate his materials, the better off the pharmaceutical industry, health professionals and the public—*i.e.*, the patients—will be.

Physician Responsibility

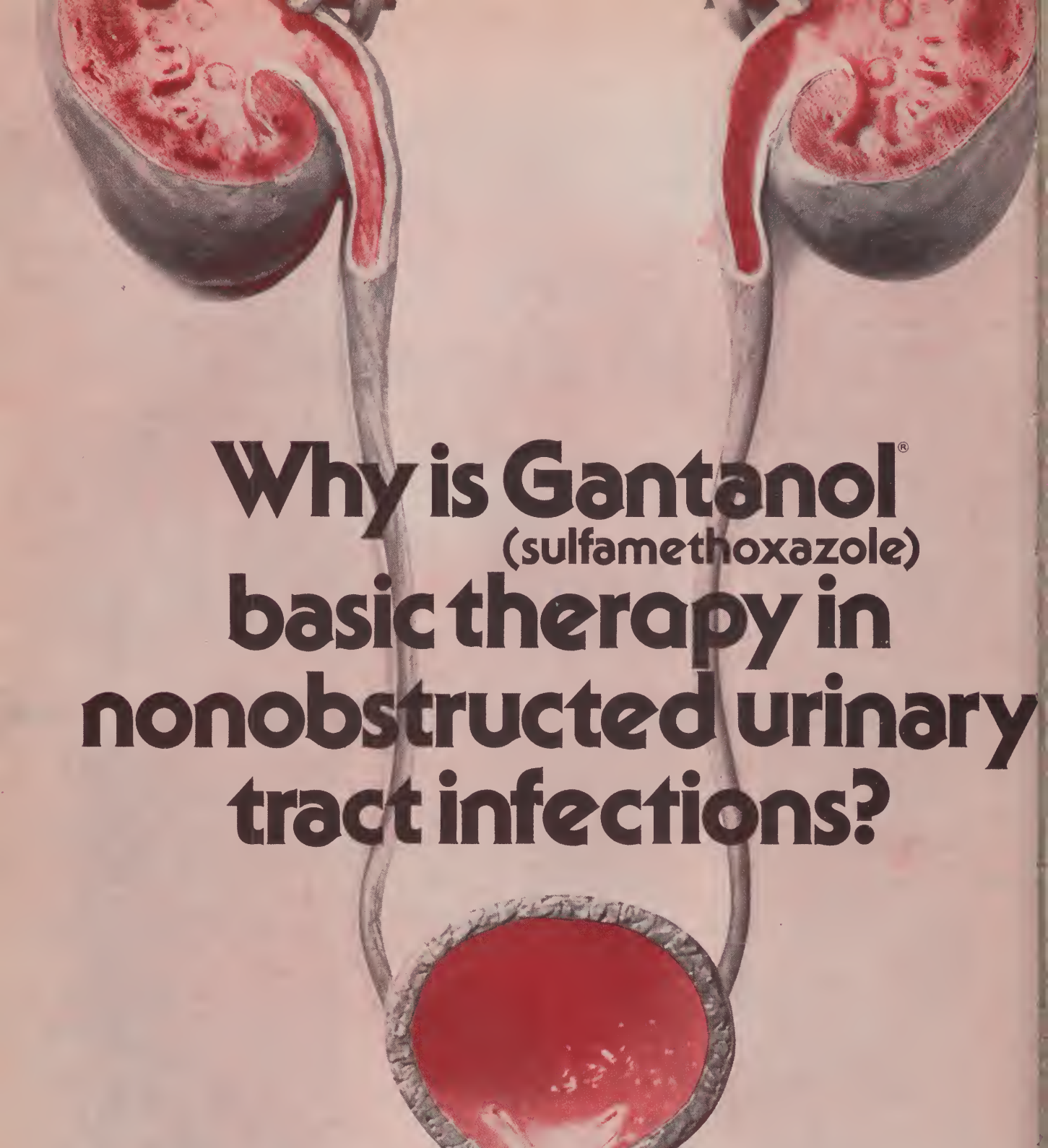
The practicing physician is in constant need of up-dated information on therapeutics, including drugs. He should and does make use of drug information and answers to specific questions supplied by the pharmaceutical representative. However, that information must not be his main source of continuing education. The practitioner must keep up with what is current by making use of scientific journals, refresher courses, and information received at scientific meetings.

The practicing physician not only has the right, but has the responsibility to demand that the pharmaceutical company and its representatives supply a high level of valid and useful information. I feel certain that if such a high level is demanded by the physician as well as the public, this demand will be met by an alert and concerned pharmaceutical industry.

From my experience, my impression is that sectors of the pharmaceutical industry are indeed ethical. I challenge the industry as a whole to live up to that word in its finest sense.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A



Why is Gantanol® (sulfamethoxazole) basic therapy in nonobstructed urinary tract infections?

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, pur-

Because it is considered a good choice...

- for efficacy in nonobstructed cystitis, pyelonephritis and pyelitis
- for control of susceptible *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris*
- for prompt antibacterial blood and urine levels in from 2 to 3 hours after initial 2-gram adult dose
- for economical around-the-clock coverage
- for maximum patient cooperation with easy-to-remember B.I.D. dosage

Basic Therapy

Gantanol®

(sulfamethoxazole)

Tablets/Suspension (0.5 Gm) (0.5 Gm/teasp.)

pura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

ORGANIZATION SECTION

KMA Secretary Reports On Annual Activities

The scope of KMA meetings during the 1973-74 Associational year and the amount of member involvement in these meetings were outlined in the report of KMA Secretary S. Randolph Scheen, M.D., and presented to the 1974 session of the House of Delegates.

Doctor Scheen's report covered all meetings, including those out of state, during the period from August 1, 1973 to July 31, 1974. Total physician/miles traveled on KMA business were listed as 165,477, an increase of 18.7% from the previous year, and total physician/hours amounted to 3,102, up 11.9%. Total physician attendance totaled 737, down 6.5% from 1973.

A chart comparing these figures for the 1972-73 and 1973-74 Associational years has been compiled by The Journal and is given below.

The Prenatal Birth Defects Prevention Clinic, an interdepartmental facility, has been established at Vanderbilt University, Nashville, to offer genetic counselling and testing to persons who fear their offspring might be defective or deformed. These services are also offered at the Child Evaluation Center of the University of Louisville School of Medicine and at the University of Kentucky Medical Center.

Arthur H. Keeney, M.D., dean of the University of Louisville School of Medicine and professor of ophthalmology, received the 21st Beverly Myers Nelson Achievement Award from the American Board of Opticianry during the recent 79th annual meeting of the American Academy of Ophthamology in Dallas. The award is given for leadership in the development of standards and other educational and scientific achievements.

The Louisville and Kentucky Lung Associations awarded four scholarships and three grants to young health professionals in Kentucky. Scholarship winners are: Stephen P. Wright, M.D., Chief Clinical Resident in Pediatrics at UL; N.K. Burki, M.D., Assistant Professor of Pulmonary Medicine, UK; John V. Zeok, M.D., Resident in Cardio-Thoracic Surgery, UK; and Raymond A. Pulsfort, C.R.T.T., Ft. Thomas. Three Pulmonary Fellows at UL School of Medicine received grants: Glen Baker, M.D., J. Datta, M.D., and A. Tahanasab, M.D.

The New Hampshire Historical Society is sponsoring a project to edit the papers of **Josiah Bartlett, M.D.** (1729-1795), a prominent New England physician and Revolutionary patriot. Persons having knowledge of his correspondence or other papers are requested to contact the Historical Society at 30 Park St., Concord, N.H. 03301.

KMA Meetings

	1972-73				1973-74			
	NO. MTGS.	PHYSICIAN ATTENDANCE	PHYSICIAN/ HOURS	PHYSICIAN/ MILES	NO. MTGS.	PHYSICIAN ATTENDANCE	PHYSICIAN/ HOURS	PHYSICIAN/ MILES
Board of Trustees	9	292	941	13,569	7	150	720	25,790
Executive Committee	4	31	149	5,426	6	42	198	6,545
Regular Committees	74	421	1,272	60,777	84	486	1,368	68,842
				Subtotal 78,640				Subtotal 101,177
Out of State Meetings	6	41	17 days	56,600	10	59	34 days	64,300
Total	93	785	2,770	139,417	107	737	3,102	165,477

PSRO DEVELOPMENTS

Activities relating to Professional Standards Review Organizations have continued to occupy a great deal of the Association's attention and time.

As reported earlier, the formation of the Kentucky Peer Review Organization was aided by The KMA Board of Trustees to conduct PSRO functions in the state, a federal planning grant was obtained to fund KPRO operations, and preparation of a conditional PSRO grant draft was begun. The conditional application proposed to perform federal review along lines suggested by the KMA House of Delegates.

At the 1974 Session of the House, four separate PSRO resolutions were introduced and Resolution Y, submitted by the Board of Trustees, was finally adopted. It closely paralleled an earlier stand taken by the AMA at the June 1974 Clinical Convention in Chicago. Resolution Y noted skepticism of the motives leading to passage of the PSRO law, but endorsed KPRO as the PSRO-implementing agency in Kentucky so that the rights and privacy of both patients and physicians would be given proper regard. This action was taken in light of the fact that the Secretary of the Department of Health, Education and Welfare would designate a non-physician group to perform review if no physician group is willing to do so.

Resolution Y also encouraged KMA members to participate in KPRO so that the input of practicing physicians would be insured but at the same time reiterated the policy of opposition to PSRO and support of the written amendments to the law authored by the American Medical Association.

On December 5-7, the KPRO Board of Directors met to make a final review of the conditional PSRO grant application and to receive comments from concerned organizations. Three days prior to this meeting new regulations were received from DHEW that required major revisions to the application. Because these revisions called for changes in some basic policy concepts, the KPRO Board of Directors felt that, after the new requirements had been thoroughly reviewed, the grant application should be rewritten incorporating only those new regulations that were acceptable and did not conflict with traditional peer review program policies. It was reported that a five month extension to the current grant would be awarded by the government to allow this rewriting.

At a meeting of the KMA Board of Trustees on December 12, the KPRO President reported on the new regulations and the reaction of the KPRO Board of Directors to them. In its discussions, the KMA Board agreed that the grant should be rewritten with acceptable concepts but that representatives of KMA, KPRO, and other interested groups should meet with the U.S. Congressional Delegation from Kentucky to make their views known concerning the objectionable aspects of the new regulations.

When completed and reviewed by concerned groups, the revised grant application would be submitted to the Department of Health, Education, and Welfare. If favorable consideration is not given to the concepts felt by the KMA Board to be nonnegotiable, it was agreed that serious thought should be given to convening a special session of the House of Delegates to reassess KMA's policy on PSRO.

It is projected that a draft of the revised conditional application will be completed by mid-March 1975, and that notice of approval or rejection should be received from the government by the end of May 1975.

In Memoriam

ALVIN LEBENDIGER, M.D.
Louisville
1928-1974

Alvin Lebendiger, M.D., died November 25, 1974, at the age of 46. Doctor Lebendiger graduated from the Columbia University School of Physicians and Surgeons in 1950, and was a professor of surgery at the University of Louisville School of Medicine. A member of the Board of Directors of Jewish Hospital, he was also a member of the Kentucky Medical Association and the American Medical Association, Jefferson County Medical Society, the American College of Surgeons, and the Louisville Surgical Society.

JOHN S. OLDHAM, M.D.
Owensboro
1905-1974

John S. Oldham, M.D., died November 15, 1974, at the age of 69. Doctor Oldham, a surgeon, graduated from the University of Louisville School of Medicine in 1934. He was a member of the Kentucky Medical Association, American Medical Association, and the Daviess County Medical Society.

JOHN H. ROMPF, M.D.
Lexington
1909-1974

John H. Rompf, M.D., died on December 2, 1974, at the age of 65. A psychiatrist, Doctor Rompf graduated from the University of Louisville School of Medicine in 1934. He was a member of the Kentucky Medical Association, the American Medical Association, and the Fayette County Medical Society.

LUDWIG H. SEGERBERG, M.D.
Louisville
1914-1974

Ludwig H. Segerberg, M.D., 60, died on November 25, 1974. A 1940 graduate of the University of Colorado School of Medicine, Doctor Segerberg was a neurosurgeon and chief of neurosurgery at Norton-Children's Hospital. He also served as clinical professor of neurosurgery at the University of Louisville and on the staff of Kosair Crippled Children Hospital. He was a member of the Kentucky Medical Association, American Medical Association, Jefferson County Medical Society, Neurosurgical Society of America, and the Southern and Louisville neurosurgical societies.

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PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

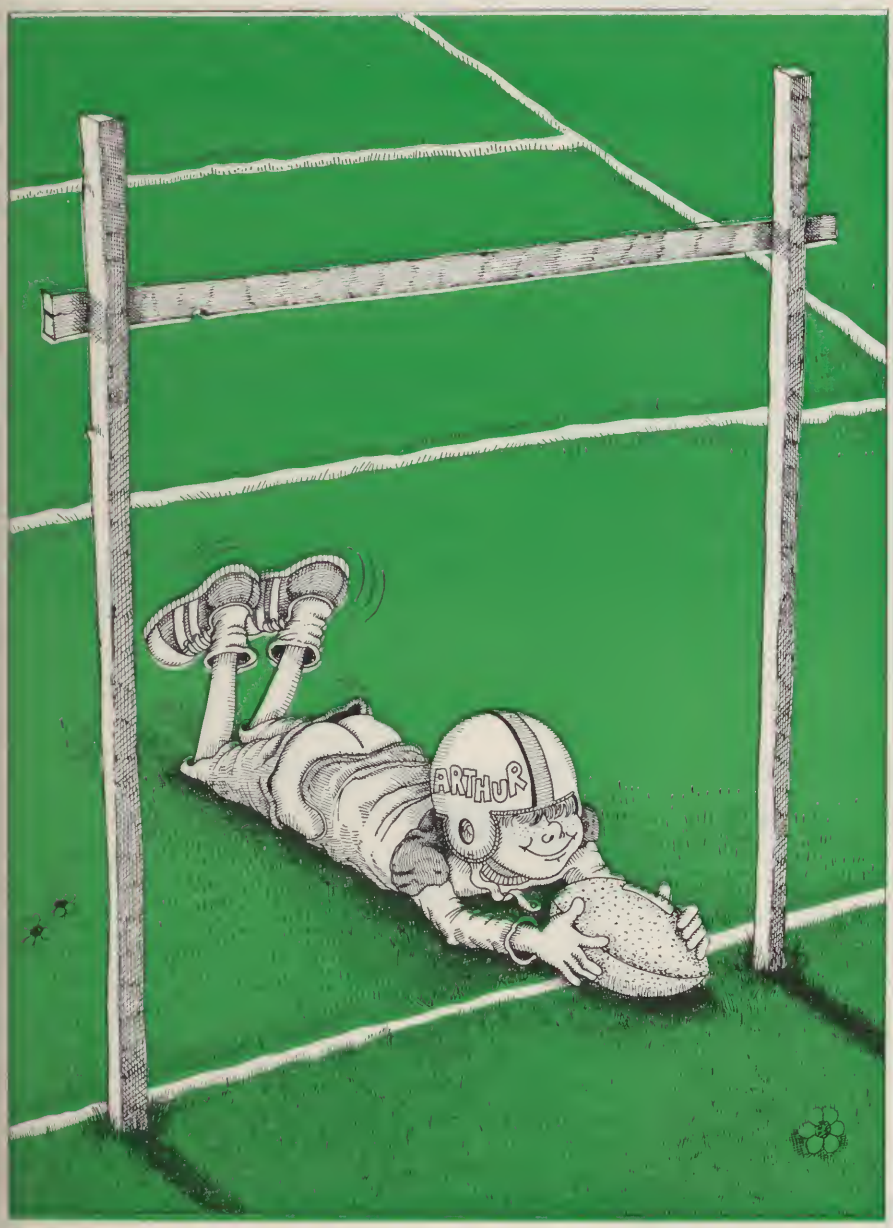
Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp.=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

One prescription can economically treat the entire family.

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New York, New York 10017

Pinworms, roundworms controlled with a single, non-staining dose of

ANTIMINTH®

(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

*Data on file at Roerig.

Please see prescribing information on facing page.

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Professional Bldg. East, 3101 Breckinridge Lane
Medix Bldg. — Adj. S.S. Mary & Elizabeth Hosp.
ST. MATTHEWS 313 Wallace Center and 108 McArthur Drive
NEW ALBANY Professional Arts Bldg., 1919 State Street
BOWLING GREEN 524 East Main Street
OWENSBORO Doctors Bldg., 1001 Center Street

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BankAmericard
Master Charge

Disruptive anxiety usually meets its match here.

• Often effective when reassurance and counseling are insufficient.
• Three dosage strengths to meet most therapeutic needs.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

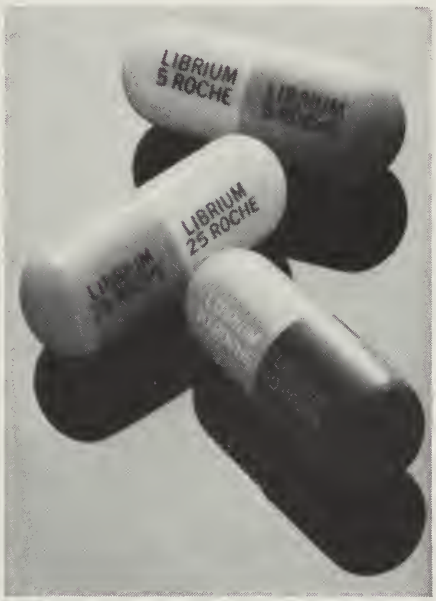
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions:

ORAL: In the elderly and debilitated and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six.

INJECTABLE: Keep patients under observation, preferably in bed, up to three hours after initial injection; forbid ambulatory patients to operate vehicle following injection; do not administer to patients in shock or comatose states; use reduced dosage (usually 25 to 50 mg) for the elderly or debilitated and for children age twelve or older.

ORAL AND INJECTABLE: Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating compounds such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual



precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

With the injectable form, isolated instances of hypotension, tachycardia and blurred vision have been reported; also hypotension associated with spinal anesthesia, and pain following I.M. injection.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral: Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

For Parenteral Administration: Should be individualized according to diagnosis and response. While 300 mg may be given during a 6-hour period, do not exceed this dose in any 24-hour period. To control acute conditions rapidly, the usual initial adult dose is 50 to 100 mg I.M. or I.V. Subsequent treatment, if necessary, may be given orally. (See Precautions.)

Supplied:

Oral: Librium® (chlordiazepoxide HCl) *Capsules*—5 mg, 10 mg, 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50, available singly and in trays of 10.

Libritabs® (chlordiazepoxide) *Tablets*—5 mg, 10 mg and 25 mg—bottles of 100 and 500.

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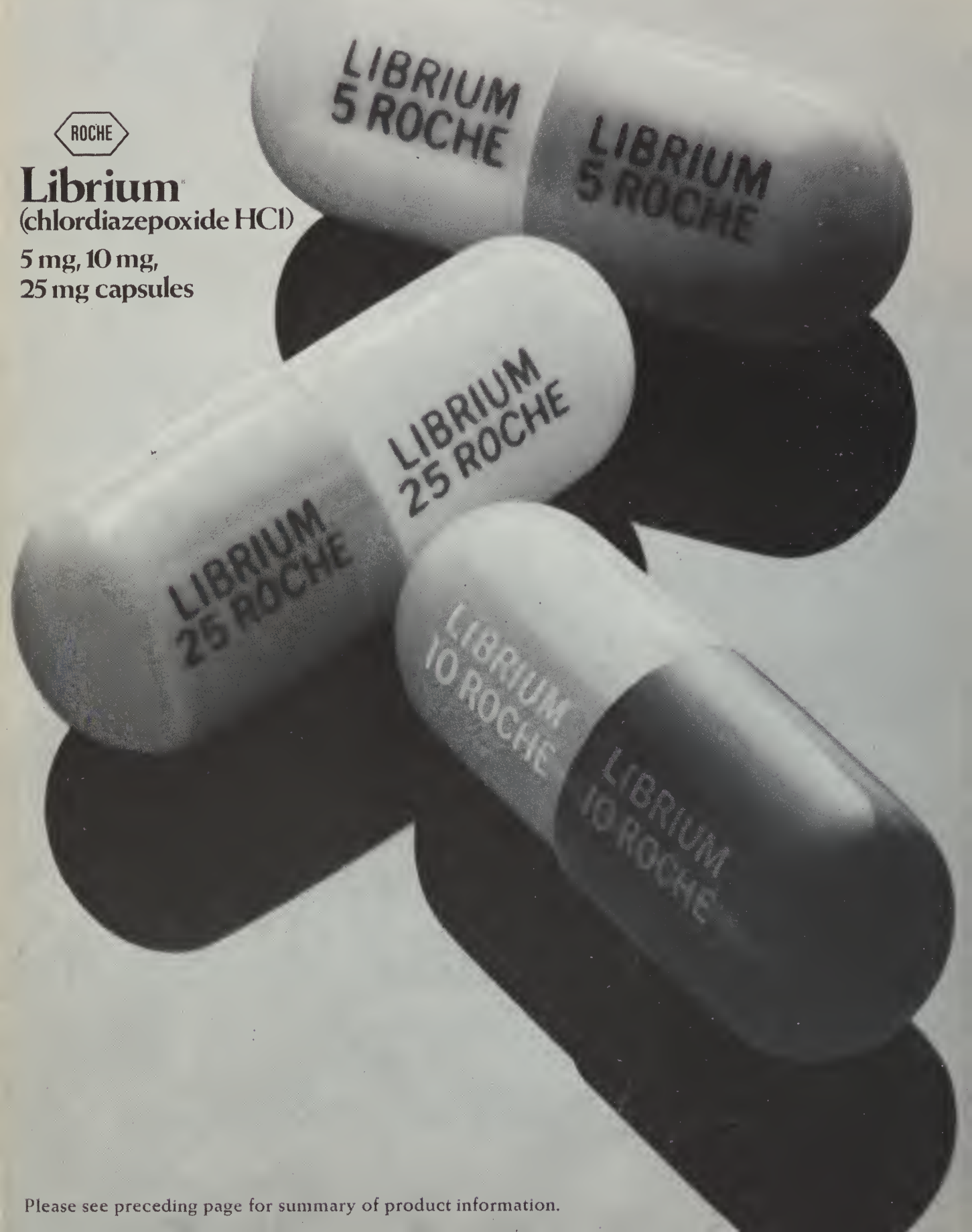
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Please see following page.

Disruptive anxiety usually meets its match here.

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Librium®
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Please see preceding page for summary of product information.

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The Journal of The KENTUCKY Medical Association

OPERATING ROOM HAZARD SYMPOSIA

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

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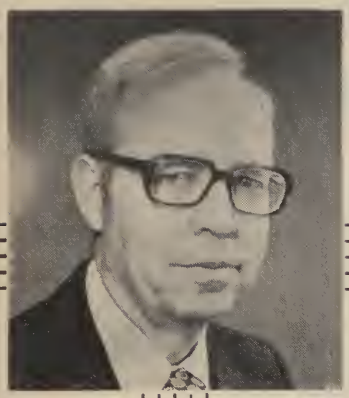
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MESSAGE FROM THE PRESIDENT



We or Wee

For sure, the complexities of life frequently confuse us as to who is friend or foe. It is like that old homily, "We have met the enemy and they is us." Do we not all long for those sweet old days when the main function of a national organization was primarily to serve as a marching-and-chowder society?

But alas, there is a cause and a purpose behind every national bush and they must be met. While you can stake a strong claim on survival as being primary, the reason for continuation must be purpose and fulfillment.

The American Medical Association is in severely threatened financial waters. Current national dues are $110, which were established in 1970, when dues were increased by $40.

Let us visit together some things received of these dues:
1) Comprehensive, scientific programs; 2) The largest publisher in the world of scientific magazines; 3) One of the nation's largest libraries; 4) The most extensive membership benefits of any professional organization; 5) The nation's largest physician placement service; 6) Broader insurance coverage at lower cost than anywhere; 7) Professional management information and guides to increased productivities and service for you; 8) AMA members' retirement fund; 9) Universal health insurance claims form; 10) AHA acceptance that medical staff should be represented on hospital boards; and 11) Due process guarantees for physician hospital privileges.

What are some long-standing benefits that we have been receiving? 1) AMA shares responsibility for accrediting hospitals; 2) Guardian of medical ethics; 3) Sponsor or co-sponsor of more than 1,000 medical meetings a year; 4) Accreditation of medical schools; 5) Accreditation of schools for training programs for allied health professionals; 6) Continuing medical education study programs; 7) Development of review committees of medical staffs; 8) Distribution of over 10 million pieces of health education literature to public schools and public health agencies; 9) Continual investigation and exposure of quacks and quack products; 10) AMA participation in review and certification of internships and residencies; 11) Development of model school health screening programs; and 12) Model drug abuse programs in local communities.

What of legislation? 1) Better drug labeling; 2) Health manpower training; 3) Drug Abuse Education Act; 4) Medicredit (the most co-sponsored of any National Health Insurance program); 5) Improved oral health; 6) Nation-wide system of emergency medical services; 7) National Health Service Corps; 8) Communicable Disease Control Act; 9) Allied health training; 10) Nurse training—maximum funding; 11) Amending anti-trust laws regarding blood banks; and 12) Extension of maternal and child care health programs.

What could have happened if AMA wasn't there? 1) Pre-certification of hospital admission; 2) Sweeping federal HMO grants; 3) Discriminatory controls on physician fees; 4) Kennedy-Griffith National Health Insurance Plan; 5) National re-licensure; 6) HEW establishment of consumer-run program review teams for Medicare and Medicaid; 7) Public utility control of your practice; 8) Mandatory government service for all medical school graduates; 9) Unrealistic restrictions on physician discretion in prescribing drugs; 10) There would have been no recognizable national voice for doctors; 11) No national scientific body for all doctors regardless of specialty; and 12) No national continuity of purpose.

These above services for us all cannot continue unless we fund them adequately. With proper financial support the greatness and majesty of the past will, indeed, be prolonged. Without enough money there will be weakness and deterioration until there will be only memories.

It is up to us and our wallets. Sacrifice is not needed. What you want for strength you can buy at small cost. The dividends will be great.

Hoyt Gardner

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

FEBRUARY

14 Louisville District Dietetic Association Program Series, St. Joseph Infirmary, Louisville

14 Louisville Planned Parenthood Day, with Albert Ellis, M.D. and Sol Gordon, M.D., Louisville Planned Parenthood Center, Inc.

14 "Deep Seated Mycoses-Laboratory and Serological Diagnosis", Veterans Administration Hospital Auditorium, Lexington

14-15 International Colloquium in Psychopharmacology, Health Sciences Center Auditorium, University of Louisville

20 Saints Mary and Elizabeth Hospital Fifth Annual Medical Staff Seminar, Executive Inn, Louisville. Fee: $10 for the evening session

22 KMA "Emergency Symposium", King's Daughters Hospital, Ashland

MARCH

5 "What's New in Radiology?", Family Practice Night Series*, 7:30-9:30 p.m.

13-15 Annual OB-GYN Review,** University of Kentucky College of Medicine, Continuing Education Center for Health Sciences, Lexington. Fee: $125

19-20 21st Annual Symposium on Cardiovascular Diseases, HSC Auditorium, University of Louisville

19 "Clinical Approach and Management of the Anemias", Family Practice Night Series*

22 Kentucky Society for Histotechnology Symposium, HSC Auditorium, University of Louisville

26 Louisville Area Continuing Education Consortium Lecture Series,* Methodist Evangelical Hospital, Louisville

APRIL

2 "Medico-Legal Problems in Relation to the Family Practitioner", Family Practice Night Series*

9 Retinoscopy Course**, University of Kentucky College of Medicine, Lexington. Fee: $100

10-11 "Current Concepts in Ophthalmology & Neurophthalmology"**, University of Kentucky College of Medicine, Lexington. Fee: $80

16 "How To Psych Out Psychiatric Problems", Family Practice Night Series*

23 "Nuclear Medicine, Dynamics and Static Studies", Louisville Area Continuing Education Consortium Lecture Series*, HSC, Louisville

24-26 "Seminar on Law & Medicine"**, University of Kentucky Law Building Auditorium, Lexington. Fee: $65

26-29 Modern Management of Major Problems in Surgery, Galt House, sponsored by University of Louisville

30 "Minor Orthopedic Procedures Workshop", Family Practice Night Series*

IN SURROUNDING STATES

FEBRUARY

20 7th Annual Infectious Disease Symposium***, Cincinnati

27-March 1 Central Surgical Association, Drake Hotel, Chicago.

MARCH

6 Student American Medical Association, Palmer House, Chicago

20-21 AMA National Conference on Rural Health, Hotel Roanoke, Roanoke, Virginia

26 "Care of the Critically Ill Child", sponsored by The Children's Medical Center, Dayton, Ohio, and Wright State University School of Medicine. Fee: $20

APRIL

3-5 Central Association for Electroencephalographers Annual Meeting, Cleveland Clinic, Cleveland

21-24 American College of Surgeons Spring Meeting, Regency Hyatt House and Marriott Motor Hotel, Atlanta

26-27 "Polytomography of the Temporal Bone", Wright Institute of Otology, Inc. and Community Hospital of Indianapolis, Inc., Indianapolis. Fee: $250

MAY

14-15 Tenth Annual Indiana Multidisciplinary Child Care Conference, Stouffer's Indianapolis Inn, Indianapolis

29-31 Microneurosurgery Symposium, Cincinnati Convention Center, Cincinnati

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*For information, contact: Gerald D. Swim, Director, Office of Continuing Education, UL School of Medicine

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LIFESAVING PARTNERSHIP... AGAINST CANCER QUACKERY

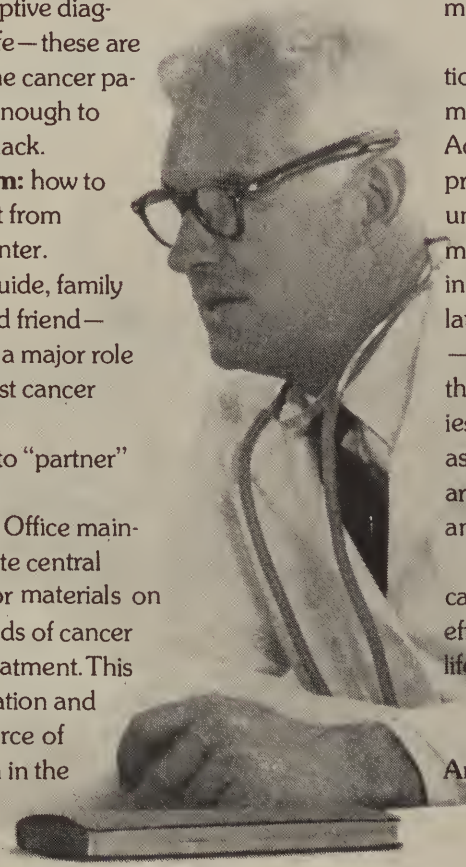
The anguish associated with cancer is compounded by the cancer quack. False hopes—harmful delays—shattering expenses—deceptive diagnoses—loss of life—these are hazards facing the cancer patient desperate enough to seek a cancer quack.

The problem: how to divert the patient from this tragic encounter.

As medical guide, family counselor, trusted friend—you, doctor, play a major role in the fight against cancer quackery.

We are here to "partner" you.

Our National Office maintains an up-to-date central clearing house for materials on unproven methods of cancer diagnosis and treatment. This is a unique operation and the principal source of such information in the country. Its services are widely used. Hundreds of inquiries are received and answered from all segments of the community, from coast to coast.



To trigger grass-roots action, we have formulated a model State Cancer Remedy Act designed to control the promotion and sale of unproven methods of cancer management. This has already inspired nine states to legislate against cancer quackery—with active support from the medical community. Copies of the model act, as well as as copies of the laws in effect, are available in our National and Division offices.

In these actions against cancer quackery, as in all our efforts against cancer, ours is a lifesaving partnership.

American Cancer Society

THIS SPACE CONTRIBUTED BY THE PUBLISHER

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Twenty-First Annual Symposium on Cardiovascular Diseases March 19 and 20, 1975

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UNIVERSITY OF LOUISVILLE HEALTH SCIENCES CENTER—LOUISVILLE, KY.

Wednesday, March 19, 1975

8:30-9:00 a.m. REGISTRATION—UL Health Sciences Center

WELCOME—F. Albert Olash, M.D., Chairman

MORNING SESSION—Jesse B. Bell, M.D., Presiding

9:00-9:45 a.m. **"Pearls in Heart Disease"**
W. PROCTOR HARVEY, M.D., Professor of Medicine, Georgetown University School of Medicine; Director, Division of Cardiology, Georgetown University Medical Center, Washington, D.C.

9:45-10:30 a.m. **"Recent Trends in the Management of Acute Myocardial Infarction"**
ELLIOTT RAPAPORT, M.D., Professor of Medicine, University of California, San Francisco, California; President, American Heart Association

10:30-11:00 a.m. COFFEE BREAK

11:00-12:00 noon **"Type A Behavior and Coronary Disease"**
MEYER FRIEDMAN, M.D., Director, Harold Brunn Institute, Mount Zion Hospital and Medical Center, San Francisco, California

12 noon-1 p.m. "GRAND ROUNDS" UL Health Sciences Center
W. PROCTOR HARVEY, M.D.
ELLIOTT RAPAPORT, M.D.
NANCY C. FLOWERS, M.D., Moderator
Professor of Medicine, Chief, Section of Cardiology, Department of Medicine, University of Louisville School of Medicine, Louisville, Kentucky

AFTERNOON SESSION—John E. Ryan, M.D., Presiding

2:00-2:45 p.m. THE BERNARD D. ROSENBLUM MEMORIAL LECTURE
"The Innocent versus the Significant Heart Murmur"
W. PROCTOR HARVEY, M.D.

2:45-3:15 p.m. **"The Pathophysiology of Sudden Cardiac Death"**
MEYER FRIEDMAN, M.D.

3:15-4:00 p.m. **"The Management of Pump Failure Accompanying Acute Myocardial Infarction"**
ELLIOTT RAPAPORT, M.D.

4:00-4:30 p.m. PANEL
Meyer Friedman, M.D.
W. Proctor Harvey, M.D.
Allan M. Lansing, M.D.
Elliott Rapaport, M.D.
Walter S. Coe, M.D., Moderator

Thursday, March 20, 1975

8:30-9:00 a.m. REGISTRATION—UL Health Sciences Center

MORNING SESSION—H. B. McWhorter, M. D., Presiding

9:00-9:45 a.m. **"Unstable Angina"**
ADOLPH M. HUTTER, JR., M.D., Cardiac Unit, Massachusetts General Hospital, Boston, Massachusetts

9:45-10:30 a.m. **"The Clinical Significance of Hemodynamic Changes in Myocardial Infarction"**
THOMAS KILLIP, M.D., Professor of Medicine and Associate Dean, Northwestern University Medical School; Chairman, Department of Medicine, Evanston Hospital, Evanston, Illinois

10:30-11:00 a.m. COFFEE BREAK

11:00-11:45 a.m. **"Angina Pectoris, an Anatomic Paradox"**
LEO G. HORAN, M.D., Professor and Chairman, Department of Medicine, University of Louisville School of Medicine, Louisville, Kentucky

11:45 a.m.-12:45 p.m. **"Acute and Chronic Heart Failure"**
ALBERT N. BREST, M.D., Professor of Medicine and Director, Division of Cardiology, Jefferson Medical College and Hospital, Philadelphia, Pennsylvania

AFTERNOON SESSION—Robert R. Goodin, M.D., Presiding

2:00-2:30 p.m. **"Myocardial Infarction without Coronary Artery Disease"**
ALBERT N. BREST, M.D.

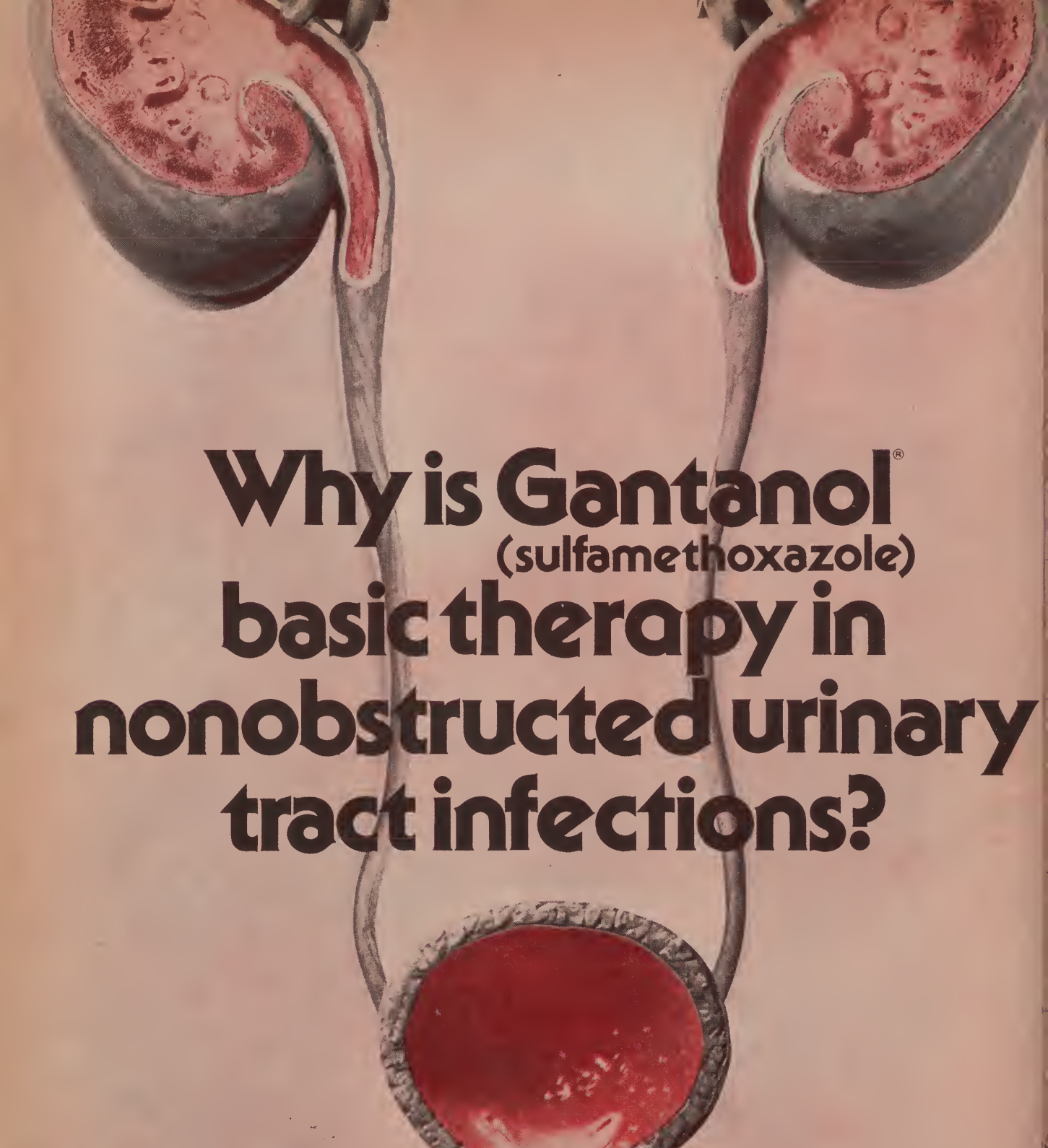
2:30-3:00 p.m. **"Medical and Surgical Management of Angina Pectoris—Current Views"**
THOMAS KILLIP, M.D.

3:00-3:30 p.m. **"The Prognostic Evaluation of the Patient with Coronary Heart Disease"**
ADOLPH M. HUTTER, JR., M.D.

3:30-4:00 p.m. PANEL
Albert N. Brest, M.D.
Leo G. Horan, M.D.
Adolph M. Hutter, Jr., M.D.
Thomas Killip, M.D.
Myron W. Wheat, M.D.
Robert R. Goodin, M.D., Moderator

This program is acceptable for 11 prescribed hours by the American Academy of Family Physicians . . . ALSO This Continuing Education activity is acceptable for 11 credit hours in Category 1 for the Physician's Recognition Award of the American Medical Association.

REGISTRATION: Physicians $20; Nurses $10; Medical Students and House Staffs—No Charge



Why is Gantanol® (sulfamethoxazole) basic therapy in nonobstructed urinary tract infections?

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, pur-

Because it is considered a good choice...

- for efficacy in nonobstructed cystitis, pyelonephritis and pyelitis
- for control of susceptible *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris*
- for prompt antibacterial blood and urine levels in from 2 to 3 hours after initial 2-gram adult dose
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- for maximum patient cooperation with easy-to-remember B.I.D. dosage

Basic Therapy

Gantanol®

(sulfamethoxazole)

Tablets/Suspension
(0.5 Gm) (0.5 Gm/teasp.)

pura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

The rectal thermometer & NEOPAP® SUPPRETTES™

(acetaminophen suppositories)





a rational regimen for childhood fever.

NEW 5gr STRENGTH

Antipyretic for children

- No salicylate side effects
- Store without refrigeration
- Convenient rectal administration
- Available only by prescription
- Grooved for one-half suppository administration

Description: NEOPAP SUPPRETTES are available for rectal administration in potencies of 2 gr or 5 gr of acetaminophen in NEOCERA® Base (a unique blend of water-soluble Carbowaxes*).

Indications: For management of fever associated with common childhood infections.

Contraindications: Sensitivity to acetaminophen or the suppository base.

Warnings: Not for use in children under three years of age. Should not be administered repeatedly to patients with pulmonary, cardiac, renal, or hepatic disease.

Precautions: Prolonged administration may result in such withdrawal symptoms as restlessness and excitement when the drug is discontinued.

Adverse Reactions: No significant adverse reactions have been reported with NEOPAP (acetaminophen) SUPPRETTES. However, adverse reactions associated with administration (usually chronic) of this drug have included the following:

Blood: Cyanosis, methemoglobinemia, sulfhemoglobinemia, and hemolytic anemia; neutropenia, leukopenia, and pancytopenia.

Allergic: Skin eruptions, urticaria, fever.

Other: Hypoglycemia, CNS stimulation, jaundice.

Dosage and Administration: Children 3 to 6 years of age: One 2 gr suppository rectally 3 or 4 times daily; not to exceed 8 grains per day.

Children 6 to 12 years of age: One 5 gr suppository rectally 3 or 4 times daily; not to exceed 20 grains per day.

*Trademark Union Carbide.

WEBCON

Webcon Pharmaceutical Division
ALCON LABORATORIES, INC.
P.O. Box 1629
Fort Worth, Texas 76101



Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed: "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."[1]*

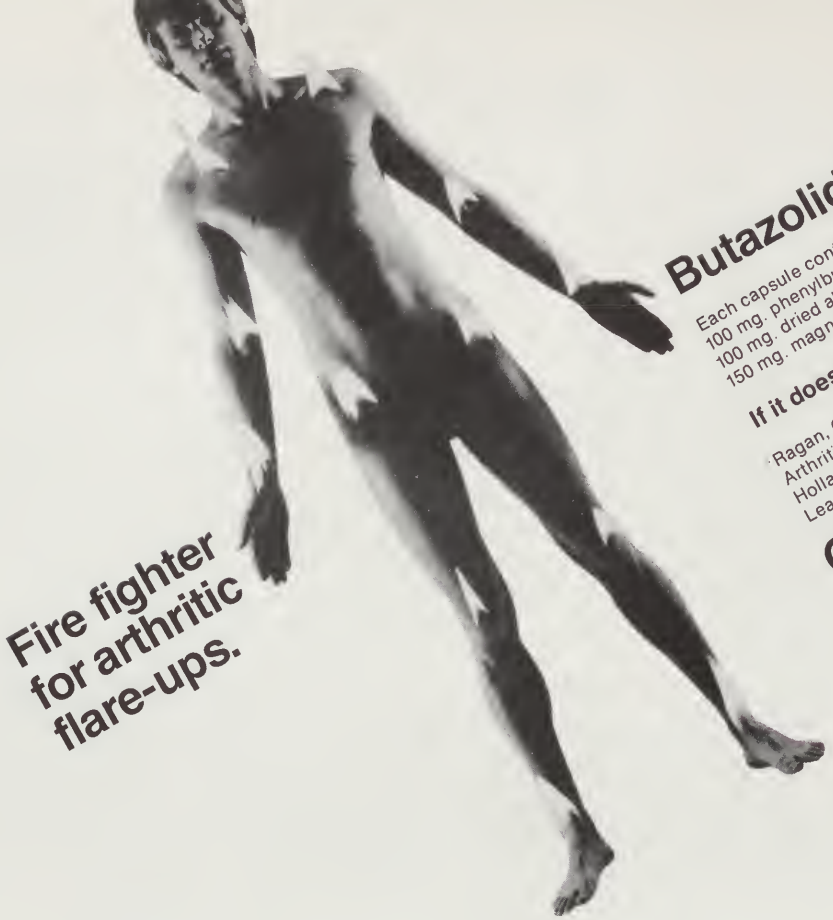
If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.



Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

Ragan, C.: The Clinical Picture of Rheumatoid Arthritis, in Arthritis, ed. 8, edited by J. L. Hollander and D. J. McCarty, Jr., Philadelphia, Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Fire fighter for arthritic flare-ups.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications: Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.

Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.

(B)98-146-070-J (10/71)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

BU 10259

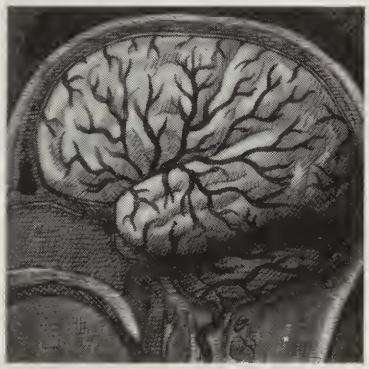
WHEN FLU HITS AND HURTS

HERE Muscles and joints



Wherever it hurts, Empirin Compound with Codeine usually provides the symptomatic relief needed.

HERE Headache

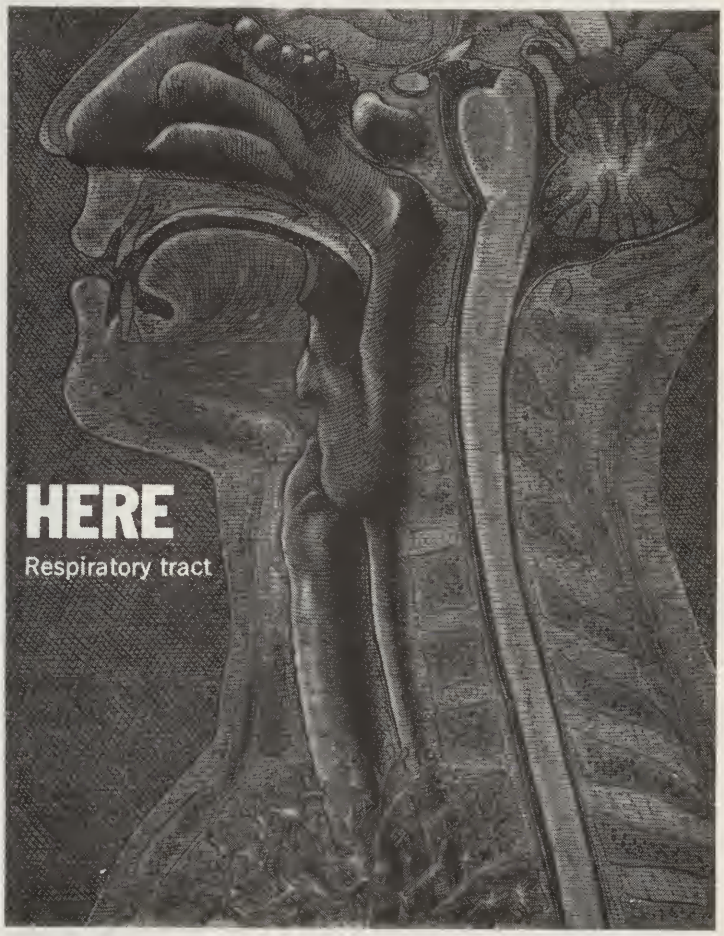


In flu and associated respiratory infection, Empirin Compound with Codeine provides an antitussive bonus in addition to relief of pain and bodily discomfort.

prescribing convenience: up to 5 refills in 6 months, at your discretion (unless restricted by state law); by telephone order in many states.

Empirin Compound with Codeine **No. 3**, codeine phosphate* 32.4 mg. (gr. ½); **No. 4**, codeine phosphate* 64.8 mg. (gr. 1) *Warning—may be habit-forming. Each tablet also contains: aspirin gr. 3½, phenacetin gr. 2½, caffeine gr. ½.

Wellcome / **Burroughs Wellcome Co.**
Research Triangle Park
North Carolina 27709



EMPIRIN® COMPOUND c̄ CODEINE

#3, codeine phosphate* (32.4 mg.) gr. ½
#4, codeine phosphate* (64.8 mg.) gr. 1

Opinion & Dialogue

The Role of the Detail Man

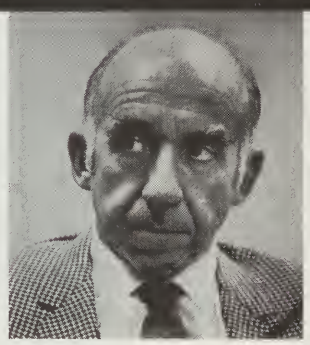


Dr. Willard Gobbell
Family Physician
Encino, California

"I may be prejudiced, but I am very much in favor of the detail men I meet. Most of them are knowledgeable about the drugs they promote and can be a great help in acquainting me with new medication."

Family Physician's Perception

I think that most general practitioners in this area feel as I do about the detail man. Over the years I have gotten to know most of the men who visit me regularly and they in turn have become aware of my particular interests and the nature of my practice. They, therefore, limit their discussion as much as possible to the areas of interest to me. Since I usually see the same representative again in future visits, it is in his best interest to supply me with the most honest, factual, as well as up-to-date information about his products.



Dr. Jeremiah Stamler
Chairman
Department of Community Health and Preventive Medicine, and Dingman Professor of Cardiology
Northwestern University Medical School

"In the total picture of dealing with health problems in this country, there is a potential for detail men to play a meaningful role."

The Positive Influence

My contact with representatives and salesmen of the pharmaceutical industry is the type of contact that people in a medical center, research people, and academic people have and that's in all likelihood on a somewhat different level from that of the practicing physician.

Let me touch on how I personally perceive the role of the sales representative. These men reach large numbers of health professionals. Thus they could be—and at times actually are—disseminators of useful information. They could consistently serve a real educational function in their ability to discuss their products.

At present they do distribute printed material, brochures and pamphlets—some of it scientifically sound and therefore truly useful—as well as some excellent films produced by the pharmaceutical industry. When they function in this

Is He a Source of Information?

Yes, with certain reservations. The average sales representative has a great fund of information about the drug products he is responsible for. He is usually able to answer most questions fully and intelligently. He can also supply reprints of articles that contain a great deal of information. Here, too, I exercise some caution. I usually accept most of the statements and opinions that I find in the papers and studies which come from the larger teaching facilities. It goes without saying that a physician should also rely on other sources for his information on pharmacology.

Training of Sales Representatives

Ideally, a candidate for the position as a sales representative of a pharmaceutical company should be a graduate pharmacist who has a questioning mind. I don't think this is possible in every case, and so it becomes the responsibility of the pharmaceutical company to train these individuals comprehensively. It is of very great importance that the detail man's knowledge of the product he represents be constantly reviewed as well as updated. This phase of the sales representative's education should be a major responsibility of the medical department of the pharmaceutical company.

I am certain that most of these companies take special care to give their detail men a great deal of information about the products they produce—information about indications, contraindications, side effects and precautions. Yet, although most of the detail men are well informed, some, unfortunately, are not. It might be helpful if sales representatives were reassessed every few years to determine whether or not they are able to fulfill their important function. Incidentally, I feel the same way about periodic assessments of everyone in the health care field, whether they be general practitioners, surgeons or salesmen.

Value of Sampling

I personally am in favor of limited sampling. I do not use sampling in order to perform clinical testing of a drug. I feel that drug testing should rightly be left to the pharmacology researcher and to the large teaching institutions where such testing can be done in a controlled environment.

I do not use samples as a "starter dose" for my patients. I do, however, find samples of drugs to be of value in that they permit me to see what the particular medication looks like. I get to see the various forms of the particular medication at first hand, and if it is in a liquid form I take the time to taste it. In that way I am able to give my patients more complete information about the particular medications that I prescribe for them.

capacity they are indeed useful; particularly in the fact that they disseminate broadly based educational material and serve not just as "pushers" of their drugs.

The Other Side of the Coin

Obviously, the pharmaceutical companies are not producing all this material as a labor of love—they are in the business of selling products for profit. In this regard the ambitious and improperly motivated sales representative can exert a negative influence on the practicing physician, both by presenting a one-sided picture of his product, and by encouraging the practitioner to depend too heavily on drugs for his total therapy. In these ways, the salesman has often distorted objective reality and undermined his potential role as an educator.

The Industry Responsibility

Since the detail man must be an information resource as well as a representative of his particular pharmaceutical company, he should be carefully selected and thoroughly trained. That training, perforce, must be an ongoing one. There must be a continuing battle within and with the pharmaceutical industry for high quality not only in the selection and training of its sales representatives, but also in the development of all of its promotional and educational material.

The industry must be ready to accept constructive as well as corrective criticism from experts in the field and consumer spokesmen, and be willing to accept independent peer review. The better educated and prepared the salesman is, the more medically accurate his materials, the better off the pharmaceutical industry, health professionals and the public—*i.e.,* the patients—will be.

Physician Responsibility

The practicing physician is in constant need of up-dated information on therapeutics, including drugs. He should and does make use of drug information and answers to specific questions supplied by the pharmaceutical representative. However, that information must not be his main source of continuing education. The practitioner must keep up with what is current by making use of scientific journals, refresher courses, and information received at scientific meetings.

The practicing physician not only has the right, but has the responsibility to demand that the pharmaceutical company and its representatives supply a high level of valid and useful information. I feel certain that if such a high level is demanded by the physician as well as the public, this demand will be met by an alert and concerned pharmaceutical industry.

From my experience, my impression is that sectors of the pharmaceutical industry are indeed ethical. I challenge the industry as a whole to live up to that word in its finest sense.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A



Keeping things in balance...*

Antivert®/25 Tablets
(25 mg. meclizine HCl)

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer

A division of Pfizer Pharmaceuticals
New York, New York 10017

A model emergency medical services program for the world's busiest airport:



The AMA helped launch it.

Most of this nation's major airports are in critical need of a well-organized system of emergency medical services. And that used to include the world's busiest airport—Chicago's O'Hare Field.

Today, O'Hare has one of the finest. It's a comprehensive program developed by the AMA, in cooperation with city agencies and airport administration.

The heart of the program is a three-echelon system of care: immediate care of casualties at the scene of the accident, lifesaving and stabilization procedures at the triage centers, and transport of casualties to the hospitals incorporated in the system.

Why did the AMA get involved? To develop a model program which can serve as a guide for other airports in establishing their own emergency medical services.

Physicians often wonder what the AMA really does. This is just one of many things. It's made possible by the physicians who support the AMA through their membership. Find out more about the AMA, how it serves the public, how it serves the profession. Just send in the completed coupon.

Join us.
We can do much more together.

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Please send me more information on the AMA and AMA membership.

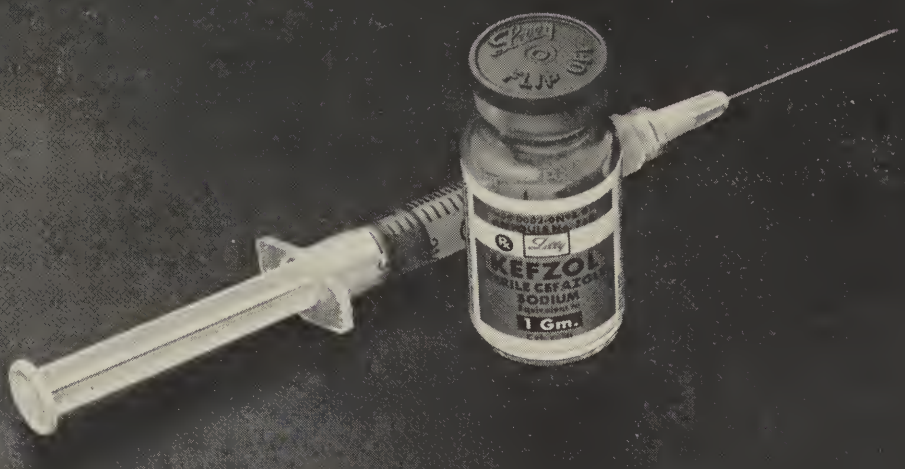
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The JOURNAL of the
Kentucky Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE BOARD OF TRUSTEES

VOLUME 73 FEBRUARY 1975 No. 2

OPERATING ROOM HAZARD SYMPOSIA

Dangers of Chronic Exposure to Anesthetics

J. ANTONIO ALDRETE, M.D.*
Louisville, Kentucky

During acute exposure to anesthetics we frequently observe the effects on the central nervous, cardiovascular, respiratory, endocrine and other systems. These are different, however, from the effects of chronic exposure to minute concentrations. Like many other pharmacological agents, anesthetics administered in the proper circumstances and dosage will produce an effect on essentially every organ system.

ANY consideration of hazards to operating room personnel must include those that may be produced by repeated inhalation of anesthetic gases and vapors throughout their working lifetimes. As far back as 1893, Hewitt[1] recognized the importance of working under well-ventilated conditions. He noted that chloroform, when given in the presence of open gas lights, decomposed into hydrochloric acid and phosgene, leading to paroxysmal cough, sore throat and headache. Whether this is fact or fancy, without question we are chronically exposed to those compounds. The specific significance of chronic inhalation of very small concentrations of anesthetics is not completely understood; however, there appears to be a certain susceptibility which in predisposed individuals may play a causative role. Nevertheless, we know of many doctors and nurses who have worked for decades under these circumstances without any apparent sign of illness that could actually be attributed to this risk.

In Vitro Studies

Bacterial studies were originally made by Benigno[2] in 1941, who observed inhibition of coliform bacterial growth on culture plates when exposed to nitrous oxide at high pressures. Nitrous oxide inhibition of growth of myocardial cells of embryonic mice was demonstrated by Kieler[3] in 1957. He noted that the number of cells entering division was lessened, probably due to what he called "mitotic poisoning" causing spindle and chromosomal abnormalities.

Exposure of yeast cultures to nitrous oxide has produced abrupt cessation of growth of hyphae and intracellular agglomerates.[4] When the same preparation was exposed to inert gases, sporulation of moles was diminished in the presence of krypton and completely inhibited by xenon.[5] Many other studies have been conducted on tissue cultures. Perhaps the most significant was that of Fink and Kenny[6], who demonstrated that growth of mammalian cell cultures is readily inhibited by

*Professor and Chairman, Department of Anesthesiology, University of Louisville School of Medicine

halothane, chloroform, methoxyflurane, trichloroethylene and fluroxene.

Animal Teratogenic Studies

The exposure of fertilized chicken eggs to nitrous oxide and oxygen was noted to lessen and delay hatchability, as well as to slow the growth rate of chick embryos.[7] A significant inhibition of the mitotic index in the neural tube of chick embryos was observed when they were incubated in an atmosphere containing 80% nitrous oxide, 20% cyclopropane or 1.6% halothane.[8]

Smith, et al.[9] observed congenital abnormalities and mortality in chick embryos resulting from exposure of eggs to a variety of anesthetic agents for six hours on the fifth day of incubation. The alterations were most severe with concomitant hypoxia or hypercarbia.[10] Supernumerary lumbar ribs and underdeveloped vertebral bodies of T11 and T12 were noted in offspring of rats exposed to 70% nitrous oxide for 24 hours on the ninth day of gestation.[11] A greater number of female fetuses may be the result of a higher number of resorptions of male embryos, suggesting a sex difference in susceptibility to resorption.

Animal and Clinical Experiments in Hemopoiesis

Exposure of a mixed strain of albino rats to varied concentrations of nitrous oxide was noted to produce a depressant effect. A dose-related effect is apparent since a 40% concentration for up to 15 days decreased white blood cell count 50%, while 80% nitrous oxide caused leukopenia of about 30% in five days. The bone marrow of these rats showed progressive hyperplasia when exposure to the gas was prolonged.[12] The production of myeloid cells was arrested and mitosis ceased to appear. The phenomenon proved to be reversible upon discontinuance of nitrous oxide exposure. Parbrook also noted that the presence of surgical wounds enhanced the leukopenia, while inhalation of nitrous oxide delayed wound healing.[13] It is peculiar that inert gases at high pressures may produce similar effects, i.e., an anesthesia-like state and lymphocytopenia were produced in mice by inhalation of helium and nitrogen at high pressures (40-60 atm)[14].

Some of the physical properties of nitrous oxide have made it a desirable gas for providing analgesia outside of the operating room. From the then current concept of the nobility of nitrous oxide, Bjorneboe[15], in 1953, advocated curarization and mechanical ventilation with nitrous oxide-oxygen for patients suffering from severe tetanus.

Two years later, Gormsen[16] using this form of therapy noted agranulocytosis and thrombocytopenia in one patient who received a variety of drugs, including nitrous oxide, curare, and chloropromazine. He attributed the hematological alterations to the latter two. Lassen, et al.[17] in a study in 1956 produced the same phenomenon in a patient with tetanus, correlating the occurrence of bone marrow aplasia with inhalation of nitrous oxide for longer than two days. The depression of erythropoiesis of the megaloblastic type and peripheral thrombocytopenia were manifestations of total panycytopenia, all of which reversed when the inhalation of nitrous oxide was discontinued.

This phenomenon was reconfirmed by Lassen and Kristensen[18] and Eastwood and collaborators[19] who reduced leukocytosis in patients with myelogenous leukemia to normal levels by having them breathe nitrous oxide from two to five days.

All of the observations described thus far were made with nitrous oxide, a nonexplosive and relatively weak anesthetic gas. It remained to be shown whether these effects were peculiar to that gas or common to other anesthetics as well.

In similar studies on albino rats placed in a specially constructed chamber and exposed to 70% nitrous oxide, 6% cyclopropane, 50% acetylene, and 40% ethylene, significant drops in white blood cell, platelet and erythrocyte counts were noted. For comparison, similar groups of rats were allowed to inhale 65% xenon, 80% helium, neon, and argon. As controls, other groups of rats were restrained in the chamber, breathing air, given less food and made hypoactive with chloropromazine. The study revealed that 70% nitrous oxide, 40% ethylene, 6% cyclopropane, 50% acetylene and 65% xenon produced significant per-

ipheral leukopenia, decreased the total cellularity of the blood marrow and altered the granulocyte:erythroblast ratio. Slight decreases were also observed in the peripheral erythrocytes and platelets. Helium, neon, argon or sulfur hexafluoride in a concentration of 80% apparently had no effect. Animals that inhaled air had small increases of blood cells normally associated with growth. Restriction of intake and hypoactivity produced by the intramuscular injection of chloropromazine resulted in insignificant changes of blood cell counts.[20-22]

From these observations we may infer that a relationship exists between the effects of gases with anesthetic properties on the central nervours system and their depressant action on hemopoiesis, although the mechanism of action may be as yet undetermined.

Other Toxic Effects

Bruce, et al.[23] in a retrospective study of the causes of deaths among American anesthesiologists, noticed higher mortality from malignancies of lymphoid and reticuloendothelial origin. It was also found that the most frequent cause of death was atherosclerotic heart disease; however, when compared to American white males of the same age group, over the same span of time, the incidence of that disease was slightly lower in the anesthesiologists. A striking finding in the study was the frequency of death by suicide, definitely higher in the anesthesiologists.

Investigators in Denmark revealed that female doctors and nurses working with anesthetics in the operating room faced a higher risk of miscarriage, a quadruple risk of premature births, and were more likely to have daughters than sons.[24] Furthermore, pregnant wives of anesthesiologists, who had little or no contact with the operating room, showed the same increased risks. Cohen, et al.[25] confirmed this data in a study conducted about the same time in Stanford University Hospitals.

More recently, Colbert and collaborators[26] have also noted an increase in cancer susceptibility in female nurse anesthetists. Although this has not been shown true for male physicians, nevertheless, it should not be ignored as a potential risk.

A most interesting observation was made again by Bruce, in young male volunteers exposed to 15 ppm of halothane and 500 ppm of nitrous oxide and in others exposed to nitrous oxide alone. Accuracy of performance of tests, in which the volunteers had to note changes simultaneously in an oscilloscope pattern and in a sound signal coming through earphones, was the same whether the subjects were exposed to pure air or to the anesthetic gases. However, there was a significant reduction in the reaction time of volunteers in responding to the stimuli when they were tested after sitting for a four-hour period in a gaseous atmosphere.[27] Although an isolated report, nevertheless, this could have implications for individuals who spend long periods of time in operating rooms. Only those of us who have had this experience have noted that after 24 hours of on call duty, there is slower response to acute stressful situations and decreased ability to perform delicate tasks when the 8 o'clock cases of the subsequent day have to be started.

Conclusions

Although this discussion presents what appears to be a set of circumstances that may create a toxic environment for operating room personnel, it is intended to serve as an alert, and by no means to produce panic or extreme unjustified concern. The hazard does exist and should be dealt with. In the past anesthesiologists, nurses and surgeons alike, aided by engineers, physicists and others, have dealt with the extreme dangers represented by explosions, electrocutions, bacterial infection and radiation. We have accepted the challenge, solved it and brought about the current status of safety. It is now time to attack this new hazard, face it head on and take the necessary steps to solve it.

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Electrical Hazards in the Operating Room

JERRY A. PHELPS, M.D.*
Louisville, Kentucky

Because of the increasing use of electrical equipment in hospitals this paper is presented to give physicians working in the operating room and critical care areas a basic understanding of the electrical hazards that may exist in a medical environment, and how to prevent them.

THE dangers of electrical mishaps in the operating room and critical care areas are quite real. It has been estimated that there are 1200 electrocutions per year (approximately three per day) in the United States as a direct result of microshock from electrical equipment used for diagnosis or treatment.[1] Although the true frequency is unknown, an electrical mishap usually indicates some form of negligence since all of them are preventable.

I. Hazards from the use of electricity.

A. **Ignition and/or explosions**

May be caused by extremely high temperatures.

B. **Burns** are either:

Chemical—Caused by electrolysis of the conductive paste by direct current (as low as 3 volts D.C.)[2]; or **Thermal**—Caused by radiofrequency (R.F.) currents of which the most common source is the "bovie".[3] When an electrocautery is functioning properly there is no burn at the exit site (Fig. 1). However, a burn will occur at the point of exit if the equipment is improperly grounded and the surface area of the exit site is relatively small, e.g., an E.C.G. needle electrode.

C. **Electrocution** results when voltages (or a difference in potentials) occurs across an individual.

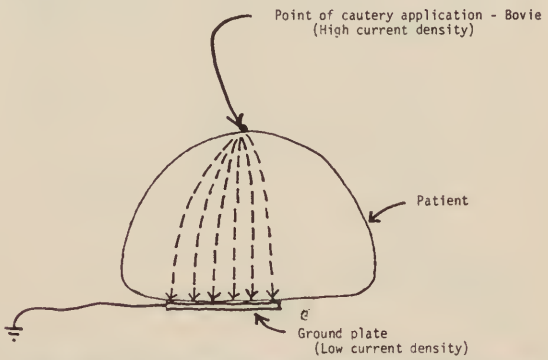
Electrical discharges from various sources are transferred to patients by either macro- or micro-shocks. Whenever an electrical current enters the body through intact skin, it is called macroshock. Intact, dry skin has a resistance from 100,000 to 1,000,000 ohms and discharges of different amperages produce various effects:

1 milliampere (ma)—is the threshold of perception of an electrical current.

10 to 15 ma—is a safe current level through intact dry skin. It is also called the "Let-Go" level in that it produces discomfort, evoking an immediate rejection response. At currents above this level, the flexor muscles may predominate, making release from a "hot" wire impossible. 50 ma produces pain, fainting, exhaustion and mechanical injury.

100 ma—results in most cases in ventricular fibrillation and/or respiratory paralysis.

When electrical current bypasses the cutaneous barrier, having a direct access into the body and passes through the heart it is called micro-shock. In a patient with a cardiac-pacing catheter, a current as small as 20/microamperes (uA) is capable of producing ventricular fibrillation. Typically, patients with a cardiac-pacing catheter only present about 500 ohms of resistance. Because 20 uA may cause ventricular fibrillation, it is generally agreed that the leakage current should be limited to about 10 uA. Ohm's Law then shows us that there can be only 5 millivolts difference between the patient and anything with which he is in contact.



Proper use of the electrocautery. No burn occurs where the current leaves the body because the current is spread out over a relatively large area

FIG. 1

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Ohm's Law: $E = I \times R$

$E = .0001 \times 500$

$E = .005$ volts

Where E-Volts, I-Current, R-Resistance.

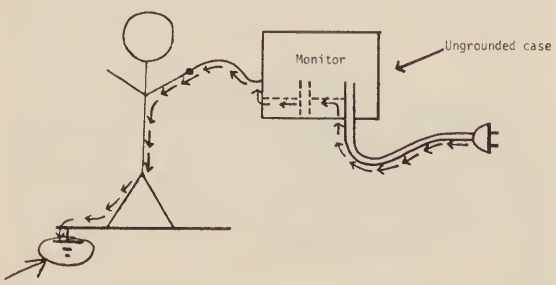
The frequency of the current is also an important factor in electrocution. The above-mentioned figures are for currents at 60 Hertz (or cycles per second, abbreviated Hz). Commercially-available electricity in the United States has a frequency of 60 Hertz.

The consideration of multiple frequencies is important because high frequencies are used in impedance pneumography, impedance plethysmography and electrocautery (current flow of about 200 ma at a frequency of 1 megahertz (MHz) to 10 MHz).

The safe level of leakage current increases as frequency increases. The estimated safe leakage current of 10 uA at 60 Hz is equal to 2000 uA at 500 Kilohertz (Khz).[4] There is, however, little known about the hazards at multiple frequencies and the present recommendation is to have the risk current level be interpreted as though all currents were transformed to one common frequency and the total effective sum measured. Therefore, if there is leakage of 5 uA at 60 Hz and 1000 uA at 500 KHz, the 1000 uA at 500 KHz is the same as 5 uA at 60 Hz, for a total leakage at 60 Hz of 10 uA.

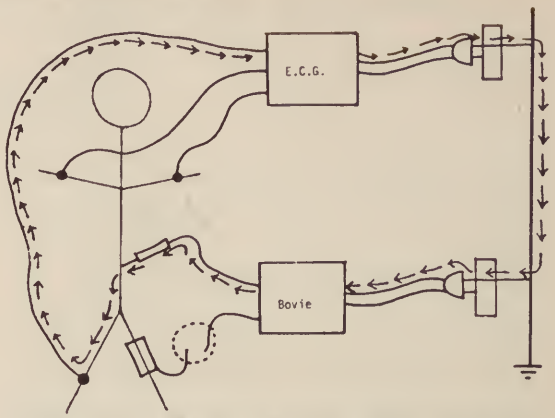
II. Causes of unequal voltages and leakage currents.

A. **Unequal voltages** develop whenever there is poor grounding. This results from (1) long lengths of ground wire with several volts difference between widely-separated grounds, (2) "cheaters" which allow a three-pronged plug to be used in a two-pronged socket without



Because of capacitive coupling between the power line and the monitor, the unit does not have to be turned on for this hazard to exist, but merely plugged into the electrical outlet.

FIG. 2



Grounding of the electrocautery through the E.C.G. ground lead

FIG. 3

grounding, (3) broken ground wires as a consequence of faulty maintenance, and (4) improper wiring and defective construction of equipment.

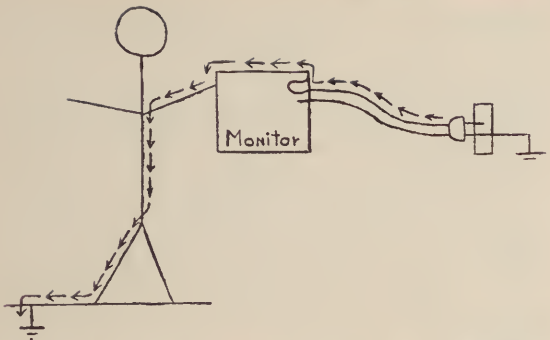
B. **Leakage currents** result from the following:

1. **Inductive pickup** which is produced by two conductors of alternating (A.C.) voltage parallel to each other. In this case, a current is generated in the wires in a fashion similar to a generator in a car.
2. **Capacitance in an A.C. line** which is developed between two conductors of an A.C. voltage isolated from each other and acting as a capacitor. Since energy can be stored in an A.C. power line just as in a capacitor of a defibrillator, a cable can develop as much as 1 uA/foot; thus it is recommended that all power lines be no longer than 10 feet to limit the leakage current to a maximum of 10 uA.
3. **Capacitive coupling** which occurs between the power line input and a monitor (Fig. 2). If a monitor is not grounded, a person may provide the path to ground.

III. Situations which may cause complications.

A. **Improper grounding**

An improperly-grounded electrocautery will function if the circuit ground can be completed by any means, and will also cause a burn if the exit of the current from the body is over a small area.



Ungrounded monitor chassis with the "hot" side of the A.C. power connected to the chassis

FIG. 4

If the electrocautery's ground is defective, grounding may be through the cardiac monitor ground lead, causing a burn under the electrode (Fig. 3).

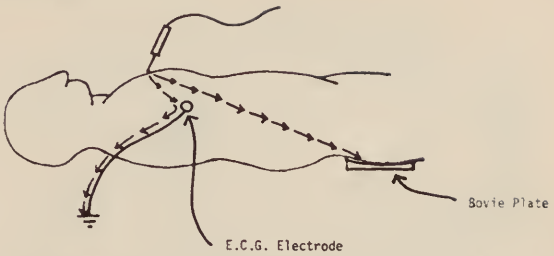
Other exit sites which have resulted in burns are the telethermometer rectal probe, resulting in a burn in the rectum, and any part of a patient touching grounded metal, such as the operating table.

One of the more common causes of improper grounding is faulty equipment. A broken ground wire or grounding pin in a three-pronged plug is a frequent finding in an electrical mishap. An extremely lethal condition exists when there is no chassis ground. If a person is grounded and touches the chassis, this is the same as sticking a finger directly into the "hot" side of an electrical outlet (Fig. 4).

Faulty grounding can also occur if the fuse is placed in the ground side of the A.C. line. When the circuit is overloaded the fuse opens, causing a fault in the ground line and leaving the hot side intact. Ideally, the ground wire should be continuous, with no devices or interruptions.

B. Radiofrequency current division

Radiofrequency (R.F.) currents do not follow the shortest distance to a ground, but go by the path of least impedance (A.C. resistance). Even when a patient is properly grounded, if the E.C.G. electrodes are near the path of current flow, some of the current may return to ground via the E.C.G. electrodes (Fig. 5). Thus, to avoid this one must place all monitoring electrodes as far from the operative site and the ground plate as close to the operative field as possible.



Radio frequency current division: If the E.C.G. electrodes are near the path of current flow, some current will exit the patient via the E.C.G. electrodes

FIG. 5

C. Capacitive coupling

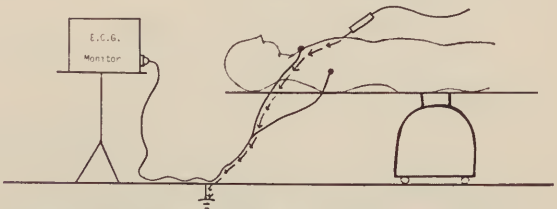
Radiofrequency current "leak" to ground by capacitive coupling when there is a long cable in close approximation to ground, typically long E.C.G. cables lying on a damp conductive O.R. floor (Fig. 6). This then provides another path to ground for the R.F. current, and a potential burn at the patient exit site. This may be prevented by placing an R.F. inductor (choke) at the patient end of the E.C.G. lead, thus stopping the flow of high frequency cautery current but allowing the passage of the relatively low frequency E.C.G. signal (use 3 to 10 millihenry R.F. choke).

D. Direct Current leakage

This may happen at the E.C.G. electrodes. As little as three volts of direct current will cause electrochemical burns due to the electrolysis of saline in the electrode paste.[2] Electrolysis of the paste causes formation of $Na(OH)_2$ which is very caustic to the tissues.

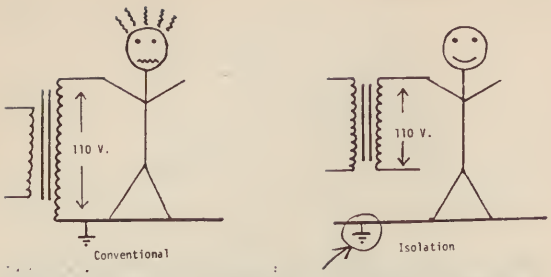
E. Induction in pacemaker leads

Sources of electromagnetic radiation which are potentially hazardous to patients with pacemakers are the electrocautery, television stations, microwave ovens, or electrically noisy appliances such as razors or power tools. By induction from electromagnetic radiation, all of the above can produce from 1000 to 10,000 uV on a short length wire, 10,000 uV across 500 ohms yields 20 uA on a short length of wire. 10,000 uV across 500 ohms yields 20 uA



Capacitive coupling providing a path to ground for R.F. currents

FIG. 6



Additional safety is provided by an isolation transformer in that the ground is a third, separate wire

FIG. 7

and this can be rectified at the electrode-tissue junction sites. This amount of current, as stated previously, can cause ventricular fibrillation in these patients.

IV. Safety Devices

These devices are utilized to make the use of electricity less hazardous and to warn and protect against malfunctioning electrical apparatus.

A. **Isolation transformer**

Both leads are "floating", i.e., neither lead is connected to ground. Therefore, a grounded person can touch either wire coming from an isolation transformer without incurring a shock (Fig. 7). In a conventional system one wire in the output is the ground, and a grounded person then completes the circuit when he touches the "hot" wire.

Nevertheless, the isolation transformer is not the "cure-all". Other leakage problems may occur because of:

1. Capacitive coupling within the transformer itself; 2. improper installation when accidental reversing of the primary leads of the transformer increases the amount of leakage; 3. leakage from the secondary leads on to the patient; and 4. the transformer design, which is engineered for a maximum isolation at 60 Hz, therefore cannot provide a good isolation at the frequencies usually found in the cautery.

B. **Ground fault detector/protector**

This circuit detects and protects against abnormal leakage paths to ground (Fig. 8).

Normally, current flows from the hot to the neutral wire in equal amounts. Therefore the magnetic fields or fluxes represented in coils A and B balance out (cancel each other) and no current flows in coil C. When a person touches the hot wire and is grounded, all of the hot current flows through coil A. However, only a portion of the total current returns through coil B as the rest flows through the person. As a result, the magnetic fields in A and B are unbalanced and a current will be induced in coil C. With coil C energized, the relay is opened. This disconnects the hot wire and the power supply, preventing any further current flow. There are also problems with this safety feature:

Most of these systems need at least 100 uA to work, so the hazard of microshock still exists, and ventricular fibrillation can be produced in 0.1 second, which is a shorter period of time than this system takes to disconnect the power supply.

C. **Ground loss monitor** (Early Warning Device)

This is a monitor that injects a direct current to sense the grounding resistance continuously. Whenever the resistance goes over 500 ohms or the line voltage gradient exceeds 5 millivolts, the unit gives an audible alarm.

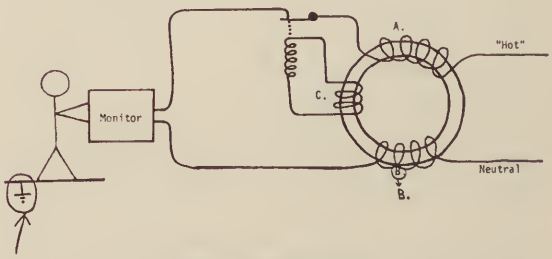
D. **Current limiting device**

These are units which are placed directly in patient cables and limit the maximum leakage current to 5 or 10 uA.

E. **Adequate grounding**

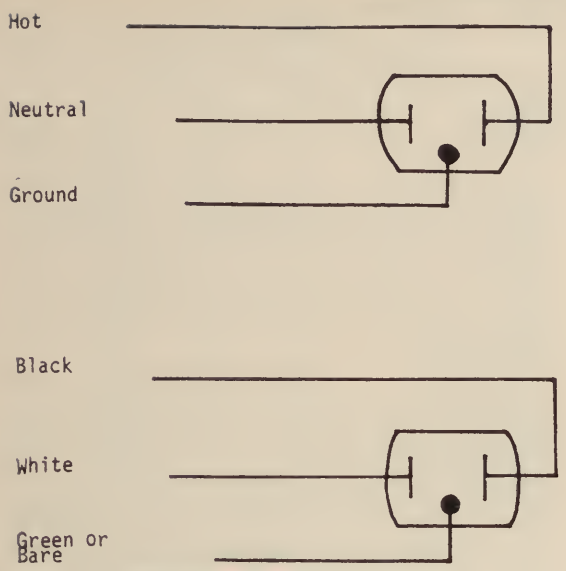
Everything conductive that a patient may come in contact with should have ONE common ground point.

1. If a conductive element does not have to be energized, it should be grounded.
2. A grounding conductor must not be used to carry the load current (as is done in "common" electrical wiring with a two-pronged plug).
3. A grounding conductor must be heavy enough to carry the heaviest fault current that may occur.



Ground Fault Detector

FIG. 8



Proper wiring of an electrical outlet
FIG. 9

4. Fuses, circuit breakers, switches, and soldered splices must NOT be used in grounding lines. Grounding lines should have sturdy mechanical connections, not just clip on. The proper wiring of a 3 conductor socket is shown in Fig. 9.

F. **Regular testing**

All electrical instruments and power lines should be checked on a regular schedule. Testing once a month is recommended.

G. **Preventive maintenance**

This is done at the same time the testing of the equipment is performed. Worn plugs, cables, etc., are replaced before a defect occurs.

H. **Safety education**

In summary, all personnel utilizing electrical equipment should be taught the fundamentals of electricity and instructed in the proper use of each electrical device that they will use.

Suggested Reference and Reading Material

National Electrical Code (N.E.C.)
1971 Ed. (revised every 3 years)
National Fire Protection Association
60 Batterymarch Street
Boston, Massachusetts 02110

Medical Electronics & Data, Vol. No. 1, Issue No. 6, Nov.-Dec., 1970

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How Much Are We Exposed To?

JOHN A. NICHOLSON, PH.D.*

Louisville, Kentucky

In general, the ambient air concentration of halothane in the two hospitals studied fell within the range reported by other workers in similar types of studies, showing higher values in those taken at Children's Hospital, as compared with Louisville General Hospital, probably because this anesthetic is used there more frequently.

SEVERAL recent reports have appeared in the literature pertaining to the low levels of halothane which are routinely found in operating room and recovery room air. Because it is known that clinical concentrations of anesthetics may produce toxicities, it has been suggested that chronic exposure to low levels of these same agents may also result in adverse effects. Chronic exposure to an operating room environment has resulted in an increased incidence of headache, fatigability, irritability, nausea and pruritis in anesthetists.[1]

The more recent work of Corbett, which showed an increased incidence of birth defects among children of nurse anesthetists, has again indicated that chronic exposure to an operating room environment may well produce appreciable toxicities in man. Halothane has been considered a likely candidate as one of the causative agents of these toxicities due to a) its widespread usage, b) because it is a halogenated hydrocarbon and is therefore suspect as a toxic agent, and c) the possibility of its action as a hapten, producing hypersensitivity.[2]

In addition to halothane in ambient operating room and recovery room air, residual amounts of this anesthetic have been found in anesthetic machines which have previously been used in the administration of halothane anesthesia. Thus there is concern over the possible effects which unintended exposure of halothane may have on the surgical patient. The relatively higher concentrations of residual anesthetics found in anesthetic machines, as compared with operating room ambient air, has received major attention with regard to the surgical patient.[3]

A number of investigators have made determinations of the levels of halothane in ambient operating room and recovery room air. Depending on such variables as the extent of usage of the drug, the time of sample collection, and the type of ventilation system which was employed, halothane concentrations were found to vary between approximately 0.5 and 10 parts per million (ppm).[1-4]

In a study of halothane concentrations in ambient operating room and recovery room air, conducted at Louisville General and Children's Hospitals, room air samples were collected at 7:00 a.m. and 12:00 noon. The samples were procured in a 100 ml glass sampling bulb fitted with stopcocks open at both ends. Air was drawn through the sample bulb into the syringe and the syringe emptied directly into the atmosphere by way of the 3-way stopcock. This procedure was repeated at least five times to insure the collection of a representative sample of air. With the syringe full of air, the distal stopcock was then closed and a slight amount of pressure was placed on the air sample by gently pushing in the syringe plunger prior to closing the stopcock. This maneuver insured that any leakage which may have occurred prior to analysis would have occurred in such a manner that the concentration of the collected gas sample would not change.

The samples were then analyzed for halothane by gas chromatography using a stream of argon-methane as the eluting agent. The halothane, upon passing through an electron-capture detector, generated a signal which was recorded on a strip-chart recorder. The peak height of the response was measured and compared with that obtained from a sample of halothane of known concentration.

The results of ambient air samples obtained from General Hospital operating room, recov-

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Table 1
HALOTHANE IN AMBIENT AIR (PPB)
LOUISVILLE GENERAL HOSPITAL

Date	Time	OR	OR 6	Hall	RR	Office
2-16	7:00	2	1	2	0	0
	12:00	320	78	99	12	10
2-19	7:00	1	1	1	0	0
	12:00	28	226	198	29	8
3-6	7:00	0	0	0	0	0
	12:00	117	14	156	27	6
3-7	7:00	1	5	3	5	2
	12:00	0	0	0	21	3
3-8	7:00	0	0	0	0	0
	12:00	3	19	19	6	2
3-9	7:00	0	0	0	0	2
	12:00	20	22	22	20	3
3-14	7:00	2	1	1	89	19
	12:00	37	597	416	92	23
3-23	7:00	1	0	0	0	0
	12:00	3	2	3	1	1

Table 2
HALOTHANE IN AMBIENT AIR (PPB)
LOUISVILLE CHILDREN'S HOSPITAL

Date	Time	OR 1	OR 2	Hall	RR	Office
4-25	7:00	12	33	19	1	3
	12:00	997	622	860	218	72
4-26	7:00	20	5	9	1	4
	12:00	29	1060	101	74	27
4-27	7:00	11	20	9	0	0
	12:00	145	1500	370	615	159
5-1	7:00	37	25	32	15	8
	12:00	215	35	166	0	70
5-8	7:00	8	4	4	2	3
	12:00	76	181	59	142	54
5-9	7:00	1	2	2	1	1
	12:00	122	680	360	114	85
5-10	7:00	35	12	17	7	7
	12:00	954	1590	845	108	26
5-16	7:00	13	15	19	50	12
	12:00	44	61	55	149	61

ery room, and an intervening hallway are shown in Table 1. Also included are results obtained from air analysis of the office occupied by the chairman of the Department of Anesthesiology, which is relatively far removed from the operating room suite. In the majority of cases there was an increase in the concentration of halothane found in the samples taken at noon in comparison with those obtained at 7:00 a.m. It was also noted that on several occasions the intervening hallway between the operating room suite and the recovery room appeared to serve as a relatively effective barrier in that the recovery room air concentrations of halothane were appreciably lower than those found in the hallway. As expected, the ambient air levels of halothane in the chairman's office were found to be consistently low.

Comparable data were obtained from Children's Hospital as depicted in Table 2. However, the frequency with which relatively high concentrations of halothane were found was increased, as evidence of the more frequent usage of this agent at Children's Hospital as compared with Louisville General Hospital. Concentrations found in the recovery room were also consistently high in Children's Hospital for the same reason.

Discussion

There has been considerable discussion in the literature pertaining to the toxicity of halothane, particularly with regard to its toxicity on the liver and the possibility of either the parent compound or one of its metabolites functioning as a hapten, thereby resulting in halothane sensitization. If sensitization does occur, then re-exposure to halothane would constitute a significant hazard and is probably the primary reason for concern over the unintended delivery of halothane to a patient receiving non-halothane anesthesia.

It appears that as long as halothane is utilized as an anesthetic agent, all surgical patients will be subjected to a low level exposure to the drug, from ambient operating or recovery room air.

Our data appear to reinforce the contention that halothane sensitization is a questionable phenomenon in clinical anesthesia. If sensitization were occurring, one would expect to see a high incidence of immune-response type of reactions in surgical patients who had previously been exposed to halothane. This has not been the case; otherwise, halothane hepatitis would be much more common than what is actually reported.[5]

However, this conclusion should perhaps be tempered by the observation that the ambient air levels of halothane have been quite low, possibly too low to constitute an adequate re-exposure to the drug as required by the classical immune-response type of reaction. Also, it is known that the interval between exposures is an important factor with regard to the production of sensitization. The ability to detect small quantities of a substance, which in our case was made possible by the utilization of the highly sensitive electron-capture detector, may be of analytical significance.

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MEDICAL PROGRESS



Pharmacologic Treatment of Cardiogenic Shock

DANIEL E. MCMARTIN, M.D., RONALD R. MASDEN, M.D., AND NANCY C. FLOWERS, M.D.*

THE shock syndrome is a hypotensive state (systolic arterial pressure < 80 mm Hg) with tissue under-perfusion, clinically manifested by oliguria, mental confusion and cool clammy skin. The term cardiogenic shock is applied when impaired pumping action of the heart is the etiology of the syndrome. Multiple different hemodynamic factors, separately or together, may result in the syndrome, making knowledge and recognition of these factors imperative for optimal patient care.

Cardiogenic shock has previously been reported in about 15-20% of acute myocardial infarctions with a 90% mortality rate[1], which has persisted despite different pharmacologic interventions[2]. More recent claims of a 4.2% incidence[3] may reflect improved hemodynamic care, preventing the development of shock by minimizing infarction size, thus limiting an important disposing factor to cardiogenic shock[4]. Recent studies have shown that the extent of myocardial injury after experimental coronary occlusion can be altered by many pharmacologic and hemodynamic interventions[5] aimed at improving the ratio of myocardial oxygen supply to demand. In general, the determinants of myocardial oxygen consumption are heart rate, myocardial contractility, and myocardial wall tension (a function of ventricular radius and blood pressure). The determinants of myocardial oxygen supply are coronary arterial perfusion pressure and coronary artery patency (assuming an otherwise normal coronary arterial to myocardial mass relationship). It is quite likely that in future treatment of cardiogenic shock, prevention will assume prime importance with pharmacologic approaches which minimize myocardial oxygen demand and/or maximize oxygen supply. Preventive measures are especially important since the therapy for overt cardiogenic shock has such a poor outcome. The initial part of this discussion will therefore be aimed at the pharmacologic prevention of cardiogenic shock.

To minimize oxygen consumption, drugs may be categorized as 1) those that minimize myocardial wall tension by decreasing peripheral resistance such as phentolamine, sodium nitroprusside, isoproterenol, nitroglycerin, and steroids; 2) cardiotonic agents that minimize myocardial wall tensions by decreasing left ventricular size in the failing heart such as the cardiac glycosides, glucagon, and beta-adrenergic stimulating drugs such as norepinephrine and isoproterenol; and 3) drugs which decrease heart rate and contractility such as propranolol. To adequately assess the proper situation for the use of these agents, it is important to clearly define the hemodynamic situation in each patient. This is best accomplished by monitoring the intra-arterial pressure (since this is impractical in many clinical situations, one must often rely on cuff pressures, realizing that in the face of peripheral vasoconstriction, the cuff pressure may underestimate the intra-arterial pressure); the left ventricular filling pressure may be estimated by measuring the pulmonary capillary wedge pressure or the pulmonary artery diastolic pressure using the floating Swan-Ganz catheter[6] (in situations where this is not practical, the central venous pressure may be used, realizing that it may not truly reflect the left ventricular filling pressure in every situation[7]), and the cardiac output (the effective cardiac output may be estimated by hourly or more frequent urine output determinations).

Phentolamine, an alpha-adrenergic blocking agent with some positive inotropic action, has been shown to improve left ventricular function

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in acute myocardial infarction[8] but its effect on infarction size and efficacy in the shock syndrome remains to be elucidated.

Sodium nitroprusside has been shown to improve left ventricular function in acute myocardial infarction[9] in patients with left ventricular failure and shock, and more recently has produced a remarkable recovery in a patient with left ventricular failure and cardiogenic shock[10] in conjunction with nitrates.

Isoproterenol, a potent beta-adrenergic antagonist, increases myocardial contractility and heart rate, and decreases peripheral resistance. Agents which increase heart rate and myocardial contractility will probably increase infarct size in infarction patients without left ventricular failure[5] and should be used only in patients with increased left ventricular filling pressures. Indeed, isoproterenol was found to be relatively ineffective and inferior to levarterenol in cardiogenic shock with acute myocardial infarction[11].

Nitroglycerin decreases myocardial wall tension by decreasing arterial pressure. Animal studies have shown its efficiency in decreasing infarct size[12], an effect that was enhanced when its hypotension and reflex chronotropic effects were prevented by methoxamine administration. Reduction of infarct size in man by nitroglycerin is being studied and its effectiveness in one patient with cardiogenic shock and heart failure has been shown[10].

The mechanism of action of steroids in the shock syndrome is uncertain and, although they have been shown to decrease infarct size in experimental infarction[5], their effect in clinical cardiogenic shock is disappointing[13].

Glucagon, a non-beta-adrenergic cardiotonic agent, will increase oxygen consumption and may increase infarct size in the absence of heart failure. Clinical effectiveness of glucagon was demonstrated in heart failure and cardiogenic shock especially when prior propranolol cardiodepression existed[14]. In the failing heart, glucagon may actually decrease oxygen consumption by decreasing left ventricular cavity size, thus decreasing myocardial wall tension.

The cardiac glycosides have been shown to increase myocardial oxygen consumption and infarct size in experimental animals[5]. In addition, physicians have historically worried about the addition of digitalis, an arrhythmogenic agent, to the irritable, acutely infarcted ventricle. However, like glucagon in the failing heart, digitalis may decrease oxygen consumption by decreasing heart size and should not be withheld.

Propranolol is a beta-adrenergic blocking agent which decreases myocardial contractility. Recently[15] it was demonstrated that propranolol decreased myocardial oxygen requirements in acute infarction patients without heart failure. This agent certainly deserves further evaluation.

Attempts to increase oxygen supply include oxygen therapy in hypoxemic patients. Hyperbaric oxygen therapy has theoretical benefits but is too costly and cumbersome for widespread use at this time.

Improving myocardial blood flow by increasing coronary perfusion pressure will improve myocardial oxygenation. Unfortunately, agents increasing systemic arterial pressure also increase myocardial wall tension and oxygen consumption and could increase infarct size in the normotensive patient.

Once the shock syndrome occurs, the main therapeutic goal is to preserve myocardial integrity while maintaining adequate perfusion of vital organs. Unfortunately, no satisfactory agent or combination of agents has yet been found to accomplish this. Currently, we monitor the cardiogenic shock patient's arterial pressure, pulmonary wedge pressure, urine output, arterial blood gases, electrolytes, blood urea nitrogen, mental status, etc. Acidosis of shock is treated with intravenous sodium bicarbonate. Occasional shock patients who are hypovolemic from prior diuretic therapy, emesis, etc., who are found to have low pulmonary wedge pressures, are given appropriate fluid replacement. In the absence of heart failure in clinical situations where pulmonary artery or wedge pressures are unknown, we recommend the administration of 300 cc D_5W over ten minutes, repeating this fluid administration twice more until blood pressure rises to about 100 mm/Hg systolic or parameters of congestive heart failure supervene[16]. In these patients, levarterenol is administered simultaneously, hopefully to increase coronary perfusion, and infusion tapers as systemic pressure rises. Dopamine has some theoretical advantages over levarterenol in that it selectively dilates renal vasculature, but Gunnar et. al. found little difference in urine flow comparing dopamine with levarterenol in cardiogenic shock[2].

In those patients with cardiogenic shock whose PCW pressure is elevated or in whom

clinical congestive heart failure is manifest, cardiotonic agents (isoproterenol, digitalis, or glucagon in decreasing order of preference) are given.

Nasal oxygen is administered to all patients.

We believe that newer approaches of vasodilator therapy, although promising, need further evaluation before widespread application.

Early application of diastolic pressure augmentation with the intra-aortic balloon pump followed by emergency coronary arteriography and coronary revascularization is promising, but costly, not widely applicable, and beyond the scope of this discussion.

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SPECIAL ARTICLES

Medical Liability

THOMAS M. MARSHALL, M.D.*

ALTHOUGH there is no evidence that the problems of medical liability insurance arise from any general deficiency in the quality of medical care in the United States, and the vast majority of physicians are never guilty of medical malpractice and are, therefore, never sued, they live constantly under a threat of a lawsuit in today's society that is increasingly inclined to seek redress in courts for damages imagined or real. The courts and juries are granting enormous settlements in those few cases where damage has been done. The result has been higher and even higher insurance premiums for medical liability insurance, and the insurance industry appears to be turning its back on the medical profession as being a hopeless and terminal victim of rampant losses.

The physicians of Kentucky are faced with the prospect in the near future of being unable to obtain insurance coverage for medical professional liability. In the main, only three companies continue to write this line of business in Kentucky. Two of the companies will not write any new business, and one will write only on a "consent to rate" basis. In some instances, premiums are so high that physicians are unable to afford coverage, and in other situations, they cannot find a company that will provide coverage.

The insurance industry is troubled by the mounting costs of professional liability coverage which, in part, is occasioned by the industry's inability, under the current system, to more accurately estimate reserves for cases involving alleged medical negligence. There is no evidence that companies are charging excessive rates; however, rates are difficult to judge because current premiums must cover anticipated future losses. As many claims are first presented to the insurance company several years after the year in which the incident actually occurred, reserves must be set aside for this cost and have had to be increased four-fold as a result of inflation and poor investment performance of these reserves and the extraordinary malpractice awards and settlements. Dollars committed and loss payments to claimants are the two dominant elements that have caused the change in instance and severity of claims during the past few years.

Why have claims increased? Most claims do involve real injuries; however, most of these injuries are not from medical malpractice. The injuries are often not the triggering factor, but the physician-patient relationship often is. The trend toward specialization in medical practice is a major reason. Although the patient benefits substantially from the technical expertise, it is clear that there is little time for each specialist to establish a warm and understanding relationship with the patient. A widespread use of medical insurance programs is a recent development which also may have affected the personal relationship between doctors and patients. Urbanization has also undoubtedly played an important role. Today's doctor practicing in a city or even a suburb is often not a recognizable member of the community.

Patients have been led to expect miracles by both printed and electronic media, and it is not surprising that when patients are faced with adverse medical results, in view of their impressions gained from the media, they feel they have been cheated and should seek legal recourse. Medical malpractice litigation has also been given considerable attention by the media, and there is a growing feeling among the citizenry that they not only have newly perceived "legal rights," but that their rights can and should be enforced—by litigation, if necessary.

A greater number of plaintiffs' lawyers have become expert in medical malpractice. The

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contingency fee gives the plaintiff's attorney a financial incentive to prosecute an action vigorously. In most other countries, the contingency fee is either prohibited or rarely used. In the United States, however, the contingency fee has long been an important and common method of financing litigation. It is used in virtually all auto, products liability, and other types of personal injury actions. This enables many patients to sue who otherwise could not afford to do so, but it also requires the patient to forfeit a substantial portion of the eventual verdict or settlement.

The changing of legal doctrines, primarily by the judiciary, has widened the scope of medical malpractice liability and is another reason for the increase in the number of claims. The "locality rule" has no doubt had a profound effect on malpractice. A medical practitioner has the duty to possess and exercise that degree of care and skill customarily possessed and exercised by other practitioners in the same or similar locality. This "locale" concept has been extended, however, to its geographic limit attempting to set a standard of medical care that would be the same for an urban setting and a rural one.

What effect has the rise in malpractice claims had on health care providers? The rise in medical malpractice claims has caused most physicians to practice defensive medicine. Positive defensive medicine involves obtaining consultations or doing tests which are desirable, but which would not be obtained except for the physician's concern about his possible legal liability; and negative defensive medicine which involves the physician refraining from rendering treatment that, though potentially helpful to the patient, involves a high risk of patient injury. Clearly much of what is described as defensive medicine actually results in the improved delivery of health care; however, there may be a serious case of over-reaction by many health care providers.

Many physicians are convinced that the majority of malpractice suits filed are completely baseless; but there is little concrete evidence to substantiate the severity of this problem. It appears that if there is a nuisance suit problem, it is the result of cases brought by attorneys who have limited experience in handling malpractice cases. In many localities throughout the country, joint screening committees have been formed to resolve the problem of nuisance suits; however, this arrangement has not been generally successful.

Claims against hospitals are rising at a greater rate than claims against physicians, and in the majority of malpractice suits brought today, the hospital is a co-defendant. Hospital liability has changed substantially. A typical malpractice case today usually involves a series of alleged errors—some on the part of hospital employees and some on the part of the attending physicians. It appears that future decisions may hold hospitals liable for failure to adequately monitor the activities of physicians on their medical staffs.

In any discussion concerning medical liability, the question of countersuit against a plaintiff who has lost a malpractice case is discussed. First, it would be an assault on a basic constitutional right and, second, to countersue, one must prove malicious intent on the plaintiff's part. Another question frequently asked—"Is there a legislative way whereby a physician can get assigned consent which includes agreement by the patient not to sue?" Actually one cannot "sign away" one's constitutional right. What can happen if a physician is without assets in an adverse settlement? Some have said they will "break the system" by giving up all malpractice insurance. It should be remembered that the courts can legally garnishee future earnings. Declaring bankruptcy is involved and could possibly not circumvent the system. The Supreme Court has a tendency to liberal decisions, and some in the past have been erratic. They could hold that a physician, "in anticipation" of a possible malpractice suit, has transferred his assets to his wife and, therefore, could rule that the intent was to circumvent the system and could void this transfer leaving the joint assets open to attack.

Then what alternative methods are there for resolving malpractice claims? Many advocate extra judicial procedures, either through arbitration or some type of no-fault insurance. Malpractice cases can be arbitrated in two possible ways. Voluntary arbitration involves a contractual agreement between the patient and the doctor to resolve all disputes between them through arbitration. Compulsory arbitration is achieved through a statutory requirement that all cases be resolved through arbitration. Voluntary arbitration is becoming more common

in malpractice insurance programs. It has been pointed out that arbitration proceedings are conducted in comparative privacy. The proceeding is far more economical than a court trial, and the disposition of cases is speedier, and a study of this method suggests that if the arbitrator is properly selected, it will be more objective and that the arbitration will not promote a plethora of lawsuits.

There has been considerable support for the creation of a no-fault method of compensating medical injuries as an alternative to our present fault-based system. However, there appear to be two significant problems to the implementation of such a system. In the first place, it is difficult to determine what would constitute a "compensable event", under a no-fault system. A compensable event is readily identified in automobile accidents, but in medical injuries, it is not. The patient is already suffering from some condition, illness or disability. The medical treatment, which may or may not have been rendered, may or may not have caused or contributed to the patient's ultimate injury. The ultimate injury may have been a natural progression of his original condition. If this were the case, it would not be compensable under a no-fault system. Complex investigation and costly litigation would still be required to determine whether a patient's injury was compensable. It would be difficult to determine what any no-fault system would cost.

What can we do now? The situation confronting the profession is an extremely complex one, and there are no simple answers which are effective. Physicians should get to know their patients better as people instead of simply patients. Any effort which an indivdual physician makes to strengthen this relationship is certain to increase his chances of escaping malpractice liability. Better records of our patients, both in the office and in the hospitals, should be kept. Most of the problems that confront various review committees in hospitals are brought about by poorly kept records. Avoid needless criticism of professional services rendered by others and avoid procedures outside the realm of your capabilities and training. Physicians should also generously avail themselves of professional consultation whenever possible. The consequences of making a mistake while "going it alone" are qualitatively different for doctors than for most other professionals. Hospitals and individual physicians should cooperate in attempting to resolve the problems which have hampered the effectiveness of peer review committees. Social and economic pressures on physicians who serve on peer review committees impair their ability to objectively evaluate the performance of their fellow doctors. One reform would be to organize these committees on a wide geographical basis thereby reducing the social and economic pressures on their membership. At the present time, malpractice litigation is clearly the most significant *external* pressure prompting physicians to practice quality medicine.

There is a pressing need to integrate hospital and physician loss prevention programs. Physicians serving on hospital staffs are independent contractors with the hospital and are separately insured. The result has been that hospital loss prevention programs do not generally involve the participation of the medical staffs even though the liability of hospitals and staff physicians is commonly interrelated.

In addition to these "voluntary reforms", what can we do now to make medical liability insurance available to all in Kentucky while seeking long-term solutions to the critical situation? If necessary, insurance carriers in the State of Kentucky should be asked to grant a six-months moratorium if they find it necessary to cancel a policy so that a physician may have adequate time to seek other coverage.

A state-sponsored professional liability program would offer a short-range solution to the availability problem without legislative or governmental action. This would offer an opportunity to negotiate for guaranteed coverage for three to five years or more, coverage in all specialities for new physicians with peer evaluation of high risks, full disclosure of financial information and claims information by the company, physician input, guaranteed premiums, and experience rating.

In November of 1973 a survey was made of KMA members regarding their interest in obtaining a group liability insurance program. The survey was sent to 117 county medical society secretaries with a total membership of 2,659 physicians. Only 37 counties replied with 147 favorable responses to a group plan. The ability of a group plan to succeed, of course, depends entirely on the willingness of the medical profession to act in a unified manner, and

undoubtedly a considerable amount of education will be necessary if such a program is undertaken as no group plan is going to succeed unless the medical profession makes a unified decision to pursue this option. Recent and future developments concerning availability and high cost of coverage may now bring about a sense of unity that has not been evident so that we could pursue one of the simplest and most straightforward options to solve the availability problem. Such a plan is not without its own problems, but a Kentucky Medical Association-sponsored system, premised on both initially guaranteed availability coupled with meaningful peer review, would be a short-term remedy for the immediate and soon critical problem.

Legislative Recommendations

More far-reaching proposals for revamping the present system for professional liability must be studied, and interim legislative solutions must be formulated. For example, imposed arbitration as an alternative mode for resolving small medical malpractice disputes would probably be quicker and certainly cheaper than litigation. Arbitration statutes could be designated to give jurisdiction over all parties, plaintiffs and defendants, involved in a specific medical malpractice case. A maximum monetary limit for invoking the jurisdiction of the arbitration board could be set with cases demanding higher amounts being handled through the present jury system. The arbitration panel should include some persons who are neither attorneys nor persons involved in the delivery of health care services. The use of arbitration would not only save time and money, it would permit the use of sophisticated decision-makers who may actually be an expert or experts in the field of controversy. Proceedings could be informal, and the technical rules of evidence could be relaxed. Perhaps the most important feature is that the arbitration process is a fact-finding procedure conducted without the emotional overtones and adversary atmosphere of the courtroom.

The present contingency fee system is unique in the United States and contributes greatly to the problem of increased litigation and to the size of the recovery. Legislation should be sought to establish a sliding scale for contingency fees, such as is used in the State of New Jersey. In other words, as the size of the award increases, the contingency fee decreases proportionately. The permissible fee should be computed on the net sum recovered after deducting disbursements in connection with the prosecution of the claim. A copy of every contingency fee arrangement should be furnished the client and filed with the court.

The ad damnum clause—or prayer for specific monetary damages in malpractice complaints—should be eliminated. This clause gives the public a distorted view of the value of the typical malpractice case. The amount prayed for often results in intensive publicity focused on the accused physician, who if the case is decided in the doctor's favor, does not receive comparable counterveiling publicity.

A ceiling on damages should be established on a reasonable basis comparable to workmen's compensation. Unless the primary issue of unlimited losses can be solved by some type of legal restraint, there may not be an insurance company able or willing to insure doctors at rates doctors can afford.

The statute of limitations on medical malpractice claims is presently tolled for minors during infancy. The statutes should be rectified as more than a decade may pass before a suit is brought on an instance involving a minor. This further complicates the methods of establishing rates and is inequitable since the vast majority of medical malpractice committed on infants is detectable within the normal statute of limitations.

Payments made to claimants arising out of medical accidents should exclude medical costs which may have been reimbursed by Medicare, Medicaid or some other third-party payer. Under existing law, a successful malpractice claimant can recover for medical hospital costs that have been paid or may be paid in the future by such third-party payers. Since over 80% of the population now has some kind of insurance which covers medical expenses, the majority of patients are obtaining double recovery when they bring a malpractice action. This should be changed, and one method of accomplishing this would be to provide that both government and private health insurers be indemnified for medical expenses recovered by a plaintiff in malpractice action. This would ease the burden on the taxpayers and allow health insurers to reduce their rates, yet would not allow a health care provider to profit from

the plaintiff's foresight in having health coverage.

Awards for pain and suffering and punitive damages should be limited or eliminated as an item from monetary damages, as is the case with workmen's compensation and automobile and no-fault statutes.

A Medical Injury Compensation Law, which would provide guidelines for handling, on an administrative level rather than in the courts, a modified form of workmen's compensation providing benefits necessary to justly compensate patients for injuries actually sustained and expenses actually incurred for which no other insurance has been paid or is applicable, should be enacted.

On December 19, 1974, representatives of the Kentucky Medical Association, Kentucky Dental Association, Kentucky Hospital Association, health insurance carriers and professional liability insurance carriers writing the bulk of coverage in the State of Kentucky, met with Mr. Harold McGuffey, Commissioner of Insurance, and some of his associates. The complex problem facing physicians of Kentucky and the nation was explored. In addition, Commissioner McGuffey met with the insurance carriers, as well as representatives from KMA, in an effort to resolve some of the immediate problems. The problem of availability and cost of malpractice insurance has to be solved soon.

A joint medical-legal task force should be formed to assist members to preserve their existing professional liability coverage and to develop new ones whenever needed while at the same time it should attempt to implement certain specific legislative remedies in the most expeditious manner.

Every KMA member will soon be asked to return a questionnaire concerning professional liability insurance. This is the most pressing situation facing medicine today.

We need your help to formulate plans. Watch for the questionnaire, complete it and return it immediately.

Malpractice Insurance—At A Crossroads or Deadend?

Riley Lassiter*

THE title chosen for this presentation is intended to spotlight the seriousness of the threat to professional liability protection. In this area the insurance industry generally is turning its back on the medical profession as being a hopeless and terminal victim of rampant dollar losses.

The Medical Protective Company is especially concerned since protecting physicians' interests is our sole function. Yet the pressures of losses experienced by other companies in various parts of the country necessarily affect our Company and affect the attitude of all insurers. A few giant losses can convince the giant insurance firms that the future risk of catastrophic losses is impossibly great. Severely limited resources in the face of expanding demands on these resources pinch all parts of the industry.

We propose to review briefly the key aspects of the current situation from our experiences, particularly with reference to Kentucky claims experience, and to suggest some paths which promise to lead us to less critical ground.

Throughout its 75-year history, The Medical Protective Company has gathered and studied facts uncovered while defending its physician-policyholders. Case files have been examined to determine why particular situations resulted in lawsuits, what types of lawsuits were involved, what procedures were being done, what equipment was being used, the age of patients, of physicians, the physician's specialty, and schooling. The fundamentals of malpractice law and the changing emphasis of legal doctrines have also been analyzed.

We have discovered many fondly-held theories to be fallacious when examined in this way. We find, for example, that the majority of malpractice claims *do* involve real injuries, a fact dutifully reported by the HEW Commission. However, most of these injuries are *not* the result of medical malpractice—either as to causal relationship or a failure to meet the standard of care. Further, the injury is often not the triggering factor. The patient's dissatisfaction may be with the fee, a snippy nurse, a physician's cold and impersonal attitude, misunderstood directions, unfortunate wording of comments by colleagues, poorly-kept records.

Other provoking factors include the extension of legal bases upon which successful legal actions may be brought; the "informed consent" approach; the "res ipsa loquitur" assault; the "guaranteed cure" grab. There is the questionable influence of attorney contingency fees, the admitted deterioration of physician-patient relationships, the error potential attendant to a multiplicity of health care providers, increased sophistication of treatments with heightened injury potentials, publicity about malpractice, publicity about the cost of care, the fact of increased cost of care, publicity of "miracle" cures, pre-trial screening panels, the image of the professions as self-centered and more interested in profits than in patients, the trend to demand compensation for injury from the most visible target, whether or not negligence exists.

To a greater or lesser degree, these factors have been at work for many years. What is happening today? What has caused the dramatic change in the incidence and severity of claims during the past few years? Undoubtedly, all of the elements mentioned have contributed in part. Yet, there are a few dominant elements.

The primary area of concern in Kentucky, as in other states, is the growth of the claims which present substantial injuries and questionable or probable legal liability on the part of the physician. These are the claims which ultimately require large amounts of dollars to resolve. For example, over 70% of the dollars paid to claimants in Kentucky in the past five years involved claims payments in excess of $25,000. Yet, this large share of the dollars was collected by only slightly more than 7% of the claimants.

"Nuisance" claims settlements, on the other hand, amounted to less than 3% of the dollars paid to claimants. This is a decrease from the percentage of a decade ago. The portion of claims which prove to be of no legal or medical merit has been on the decrease. This is based on a retrospective analysis of claims resolved, not on assessment of claims as they are reported.

The percentage of claims resolved by favorable court action in Kentucky was higher in 1974 than in any of the preceding four years. The last five year average, nonetheless, is equivalent in technical legal victories to that of a decade ago.

The major shift in claims has been from those which could be resolved for a moderate amount of money to those which require substantial payments. Of even greater concern than the number of major claim payments is the fact that the amount of money involved in these payments has increased so very drastically. Without limits on amounts recoverable from physicians, this trend is bound to continue to the point where the physicians and the public will no longer accept it. We cannot, perhaps, provide full and total compensation for everyone with an injury, and still have any funds left for other purposes.

The core of the problem, as viewed by this company, is in the dollars committed rather than in legal doctrines, social concepts, or medical techniques. The company has made strong efforts in recent years to lower claims investigation and supervisory expenses. Loss adjustment expenses and other expenses of the company are well under control. However, there has been a continual upward surge each year in loss payments to claimants. Here is the major cause for increases in malpractice premiums and for difficulty in obtaining coverage.

*General Agent, Medical Protective Company

Here is where the bulk of the premium dollar goes.

Big dollars, risked and lost, are the central insurance problem today. Damages paid, indeed, have become a problem which overwhelms and dwarfs all others. Paid losses assume such proportions today that all other efforts in claims prevention, in injury prevention, in alternate methods of handling litigation, in underwriting, in loss adjustment control, in professional upgrading—all of our combined efforts in all of these areas will be fruitless unless we can resolve the primary issue of unlimited losses.

Dollar awards made or encouraged by courts, juries or panels are without restraint today. Individual physicians are subject to damage awards as great as may be assigned against major industries. Unless awards assignable to physicians can be capped, there may shortly be no insurance company in the world capable or willing to insure physicians for rates that they can afford. You have observed the trends.

I do not mean to suggest that there should not be appropriate compensation for injury, negligently come by or not. If society believes that every less-than-perfect result sequentially related to medical treatment should entail compensation to a patient, a responsible and efficient method for funding such a program should be devised. But, professional liability insurance is not intended, nor could it ethically attempt, to administer a patient compensation program. Our job is protecting physicians.

Premiums have risen rapidly because of the unlimited awards. These unlimited awards have attracted a tremendous influx of additional claims, also. The main effort must be nailing a ceiling on malpractice awards. The medical profession can not earn enough money to continue to pay multi-million dollar awards. Nor will responsible insurance companies shoulder the catastrophic risk of a "run" of such awards. A lid *must* be placed on the caldron. Statutory limits on personal injury awards recoverable from physicians could achieve an acceptable and manageable loss pattern.

Until about 10 or 15 years ago there *were* effective limits placed on malpractice awards. Initially, no insurance dollars were involved in the service contracts of this company. Later indemnification insurance was added to the contract, the recoverable amount being limited to the assets of the physician, which he might recoup up to the limits of his policy. Still later, the insurance limits became divorced from the policyholder's assets. Bankruptcy was no longer a bar to collecting insurance. But, new limitations evolved. The Medical Protective Company and its loyal policyholders held the line for many years by refusing to carry high limits of insurance. As a practical matter, this effectively limited awards and settlements in those areas where The Medical Protective Company was the predominant insurer. Growing fear that the high awards in New York and California might come to the Midwest prompted physicians to demand the company provide higher limits. We did, and from that time forward, there has been no limit, either legal or practical, to keep malpractice awards and settlements within reason. Restoration of reasonable limits would moderate losses, numbers of claims, risks, premiums, health care costs. It is the one sure course.

Together with the drastic increases in dollar cost of individual claims is the follow-up problem of far larger numbers of claims being presented. This trend is particularly difficult to cope with in medical malpractice insurance because of the long time interval between the date of the incident and the date when it is reported to the insurer.

This is a problem peculiar to malpractice coverage and is the major reason why actuarial forecasts have continually proven inadequate in the past decade. Dollar values have changed faster than estimates of premium needs of five to ten years into the future. The solution adopted by the London insurance market—the "claims-made" policy—is unpopular in this country, but it may prove to be the only practical method to cope with the acute time differential problem.

Consequently, save for a very few, insurance companies have opted to discontinue offering professional liability protection. Massive decline in stock values during the past year have severely limited the ability of most insurance companies to expand their operations. Indeed, spokesmen for the insurance industry have been indicating that there may well be a general insurance shortage in the future. This is especially critical for physicians. Companies with reduced financial capabilities will be seeking to eliminate the more dangerous and less profitable areas of their operation, such as medical malpractice, rather than adding to them.

Some companies, The Medical Protective Company included, will remain, but necessarily will have to tighten their underwriting guidelines. The company is obliged to protect and conserve its resources for the future benefit of present and past policyholders.

For a decade or so, it was believed that physicians could afford to pay any conceivable damage award for an indefinite period of time. We are chin up against a stone wall of reality today, however. Either responsible limitations on awards will be established or there will be an end to the willingness and ability of the investors to gamble on physicians. We suggest that the best method of reestablishing limits today is through legislative action. Limitations of dollars recoverable from physicians is the main highway leading toward an acceptable, non-inflationary solution of the losing proposition which has been the lot of professional liability insurance.

GENERAL INTERNIST, board qualified, with or without subspecialty training, to join internist group of four. Salary first year, to graduate into partnership. Excellent working conditions, hospital affiliation, and consultant group to work with. Contact **Dr. John E. Myers, Jr., 2370 Nicholasville Road, Suite 206, Lexington, Kentucky—(606) 277-6145.**

EDITORIAL

Thoughts on the Insurance Crisis

THE problems of physicians and hospitals in relation to professional liability insurance and medical malpractice have been around for a good many years, steadily increasing in intensity, exploding in the past few years until now, it seems, they have reached the "crisis" stage. These problems were the subject of a special meeting held at KMA Headquarters on December 19, 1974.

We have been reading reports from some of our sister state organizations where literally thousands of physicians have suddenly found themselves without insurance when a carrier announced that it will no longer provide coverage in that state after a certain date. The true crisis arises when neither these physicians nor their medical associations can secure adequate coverage through another company at any cost.

The problem has not yet reached this stage in Kentucky—a statement that may be debated by a few of our members who, for one reason or another, have lost their liability coverage and, at this writing, have been unable to replace it. To them, the crisis is HERE and NOW!

The subject is discussed in considerable detail in this issue in *The Journal* in separate articles by two men who qualify as experts in the field. Thomas M. Marshall, M.D., Co-Chairman of KMA's Physician-Attorney Committee, and Riley Lassiter, representative of the Medical Protective Company in Kentucky, review many of the reasons that have been advanced to explain the "explosion" of malpractice claims as well as the size of recent judgments and settlements, and discuss some of the possible remedies—both long-term and short-term. (Doctor Marshall chaired the meeting referred to above and Mr. Lassiter's paper was one of those presented during this session.)

If there is any justification for a feeling of encouragement in this dismal picture, it is the knowledge that both the KMA and the AMA are pursuing an urgently active role in the search for solutions to the problem in cooperation with the hospital association, the insurance carriers, and representatives of the government. Harold McGuffey, Commissioner of Insurance in Kentucky, has become deeply involved in pursuing the matter locally. Caspar Weinberger, Secretary of H.E.W., has sent a report of the serious situation which exists, together with recommendations, to the President and to Congress.

There is, however, one important consideration in any possible long-term solution to the professional liability crisis which does not seem to have been given sufficient emphasis. We refer, of course, to the education of the public. It is only recently that the media has even recognized that the problem exists. Legal actions filed against physicians and hospitals are prominently reported, including the large amounts "prayed" for in the suit; unreasonably large judgments are head-lined by both printed and electronic media. Decisions in favor of the defendant apparently are not considered newsworthy.

Until the public is made thoroughly aware of the effects of the proliferation of suits and the rash of exorbitant judgments on (1) the availability of medical care, and (2) the cost of care, there is little hope of obtaining the legislative remedies which, most authorities seem to agree, are essential to the eventual solution of the problem.

The physician who is without liability coverage cannot obtain hospital privileges and, in today's environment, would be a fool to advise or prescribe treatment for any patient. In effect, the community has lost his professional services. The tremendous escalation of premium costs for this insurance for both physicians and hospitals (if it is available at any cost) obviously must be passed along to the consumer—the patient—in higher fees and higher charges. Add to this the in-

creased costs related to the practice of defensive medicine (additional consultations, laboratory and x-ray studies which are really not "medically necessary"—but who can argue with them?), and we have a significant factor in the rapidly rising cost of health care.

An informed public can make its concerns known to legislators on both local and national levels and obtain action. While waiting for the legislative wheels to grind, the profession can re-double its efforts toward improving the physician-patient relationship, can spare no efforts toward assuring the quality of care rendered in our hospitals, and can guard zealously against any action, by word or deed, which might contribute to the liability of a peer.

HBA

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Since its formation in 1961, the American Medical Association Education and Research Foundation, better known as AMA-ERF, has donated more than $25,000,000 in **unrestricted** grants to the nation's medical schools and guaranteed over 53,000 loans worth $61,000,000 for medical students, interns, and residents. Additionally, AMA-ERF maintains funds for categorical research grants, scholarships, and rural and community-oriented health projects, such as the Boy Scouts of America Explorer Program aimed at development of future physicians, and the annual International Science and Engineering Fair which encourages young people to follow scientific careers.

The work of AMA-ERF is made possible only through the generosity of its contributors. Every dollar contributed to AMA-ERF goes into the fund and the AMA underwrites the administration of the Foundation. Approximately two thirds of the foundation's income is derived from concerned physicians and their wives who nationally and locally, through their medical auxiliaries, carry out a myriad of fund-raising activities. The remainder is obtained from foundations; pharmaceutical and other industries; state, county, and other medical societies; and from the general public.

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FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

What requires recognition and demands stress is that a number of patients have widespread dissemination of disease that is clinically detectable at the time of initial diagnosis. When this fact is taken into consideration, it seems self-evident that the sequence of events described above warrants modification as follows: when a breast mass suggestive of possible neoplasia is detected, mammography should be performed in recognition of the fact that if the radiographic appearance is characteristic of tumor, an 80 to 90 per cent positive correlation will exist with the result of biopsy; patients with clinical findings or mammographic examination highly suggestive or typical of cancer should be evaluated before biopsy with noninvasive diagnostic studies such as radiologic skeletal survey and bone scan; if obvious metastatic disease is apparent before biopsy, operation can be limited to an excisional diagnostic biopsy or even needle biopsy under local anesthesia in hospitals where the latter is practiced. Under some conditions simple and local removal of the growth may be undertaken. Biopsy for confirmation of the diagnosis or simple mastectomy in these selected patients will both avoid any serious functional disability and be minimally deforming from a cosmetic standpoint. The therapeutic management can then appropriately focus upon methods having a systemic effect, the response to which will influence the prognosis rather than the type of surgical attack on the primary site.

RALPH E. JOHNSON, M.D.

—from *The New England Journal of Medicine,* Nov. 28, 1974, p. 1188

Edsel Murphy's Law: If anything can go wrong, it will.

Corollary I: When a problem appears to be solved, you've overlooked something.

Corollary II: When a problem actually is solved, the solution creates another problem worse than the original problem.

Corollary III: A device selected at random from a group having 99% reliability, will be a member of the 1% group.

Corollary IV: A document discarded as worthless will be vital shortly after the trash is collected.

Corollary V: In any mathematical computation, a decimal will be misplaced, a factor from the numerator will move into the denominator, constants will actually be variables, and the most obviously correct figure will be the source of error.

Corollary VI: (Selective Gravitation) A dropped object will land where it can do the most damage; a round object, if dropped, will roll to the most inaccessible point on the floor.

Corollary VII: The hidden flaw never remains that way.

Corollary VIII: Inertia is always working against you.

Corollary IX: Everything is harder than it looks.

Corollary X: An easier way is always discovered after you've already done it.

Corollary XI: If it is interchangeable, it really isn't.

Corollary XII: Your luck is always bad; God is inevitably on someone else's side; opportunity will only knock when you're out.

O'Shea's Law: Murphy was an optimist.

—from *DukEngineer,* October 1974, p. 12

Limited experience suggests that the estrogen receptor level of a primary tumor, determined at the time of mastectomy, may predict subsequent response to endocrine therapy if metastases appear at a later time. Because specimens of metastatic cancer are not always surgically accessible, a number of centers are now determining the receptor content of primary breast cancers at the time of mastectomy, so that this information will be available in case of recurrence.

On the basis of the foregoing results, it appears that the determination of estrogen receptors in human breast cancers, both primary and metastatic, can furnish information useful to the clinician in his choice of the optimal therapy for the individual patient with advanced breast cancer.

ELWOOD V. JENSEN, Ph.D.

—from *The New England Journal of Medicine,* Dec. 5, 1974, p. 1253

Q What else do you suggest for ending inflation?

A I have a number of prescriptions: first and foremost, responsible Government policies. That means that the Government doesn't spend more than it has available. Any government that does so—except in very special circumstances—ought to be thought of as immoral. We've got to turn this whole fight against easy deficits and inflation into a moral issue, not just a matter of some economists' or politicians' calculations.

The economists think it's dumb to look at such things in terms of moral issues—as a matter of theology—but it's the only realistic way to balance the many pressures and inducements to lax behavior and unrealistic estimates.

HERMAN KAHN,
DIRECTOR OF THE
HUDSON INSTITUTE

—from *The U.S. News & World Report,* Dec. 2, 1974, p. 54



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

CASE 14-72. The patient was a 33-year-old white married female Gravida 8, Para 8, whose last child was delivered three years ago. The patient had been having normal menstrual periods prior to admission and her husband claimed that they were using birth control. The patient had been feeling somewhat tired and was told that she had anemia by her family doctor. She had some minimal irregular vaginal bleeding for several days prior to admission. On the morning of admission she complained of a little shortness of breath and was found later in the day lying on her bed unable to speak or communicate. She was comatose 30 minutes later and was seen in the emergency room of another hospital, and referred to a larger hospital for evaluation.

When seen by the neurosurgical service it was felt that she had a space taking intracranial lesion, and in view of her vaginal bleeding a gynecologic consultation was requested. The gynecologist reviewed the history with the patient's family. On pelvic examination the uterus was found to be 8 to 10 weeks size, but no adnexal masses were felt. A chest x-ray showed several metastatic lesions in the lung fields and an electro-encephalogram was reported as being compatible with a Cerebral Vascular Accident. Complete blood count was normal, as was a BUN. Blood sugar was reported as 235. Serum electrolytes were within normal limits as was the prothrombin time and the partial thromboplastin time. Arterial blood gases revealed a PO_2 of 88, a PCO_2 of 25, a pH of 7.47, and an O_2 saturation of 96.8%. A carotid angiogram was done which showed a large intracranial mass, poorly defined. A pregnancy test was reported as being strongly positive. At this time the presumptive diagnosis was that of metastatic trophoblastic disease, and a D&C of the uterus was carried out under local anesthesia. A frozen section on the curettings obtained was reported as choriocarcinoma with massive necrosis and acute inflammation. Some 10 or 11 hours after admission while the patient was receiving IV mannitol, the blood pressure dropped to nothing and there were no palpable pulses. The EKG showed an irregular rate of about 30 to 40 beats per minute. The patient was taken to the OR where an emergency craniotomy was performed to relieve intracranial pressure. A large hematoma was encountered and evacuated, and multiple biopsies were taken.The patient was taken to the recovery room still unconscious, and finally transferred to the intensive care unit. The tissue removed at the time of craniotomy was reported as fragments of central nervous system tissue with no cancer identified. Actinomycin D chemotherapy was begun, but the patient had a gradual downhill course with deterioration of her vital functions and pronounced dead at 7:40 a.m. on August 9, 1972. The final diagnosis was extensively metastatic trophoblastic disease with death due to intracranial hemorrhage.

Comments

The committee classified this case as a direct obstetrical death with no preventable factors. This is indeed a very sad situation with so little early symptomatology.

During the last several years, great advancements have been made in the treatment of choriocarcinoma. Approximately 40-50% of choriocarcinomas are preceded by term pregnancies.[1] The treatment of this previously uniform disease is now such that cure rates run quite high.[2] The management of this disease is highly specialized and requires expertise with thorough knowledge and proper treatment in order to obtain optimum cure rates.

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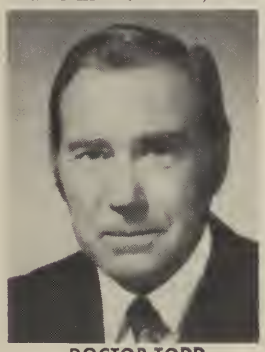
ORGANIZATION SECTION

"Medical Critical Dimension" Features AMA Speakers

KMA's special statewide seminars, "Medical Critical Dimension, 1975", has attracted several prominent authorities to discuss medical issues with Kentucky physicians. To be held in five regional locations from February through May, each seminar has as its keynote speaker an officer of the American Medical Association to review "National Health Insurance and Its Ramifications". James H. Sammons, M.D., AMA Executive Vice President, speaks at the first seminar for Fayette County, and Malcolm C. Todd, M.D., AMA President, attends the Jefferson County meeting.



DOCTOR SAMMONS



DOCTOR TODD

As announced by Hoyt D. Gardner, M.D., KMA President, seminar topics and speakers also include: "The Liability Insurance Problem in Kentucky", Harold B. McGuffey, Commissioner of Insurance of the Commonwealth of Kentucky; "The Role of Voluntary Pre-Payment Systems", to be given by an executive of the National Association of Blue Shield Plans (James D. Knebel, Executive Vice President, for Fayette and Jefferson County seminars); and "Kentucky's Mandatory Medical Education Plan, 1975", R. Glenn Greene, M.D., Chairman, KMA Continuing Medical Education Committee. Doctor Gardner will present a summary of "Medical Critical Dimension, 1975", and a question and answer session follows.

Dates and locations of each seminar are:

Fayette County—Wednesday, February 12th, at the Campbell House, Lexington

Jefferson County—Thursday, February 13th, at Stouffer's Inn Grand Ballroom, Louisville

Daviess County—Tuesday, March 25th, in Owensboro (place to be announced)

Boone-Campbell-Kenton Counties—Thursday, April 3rd, at the Rowntowner Motor Inn, Ft. Mitchell

Boyd County—Thursday, May 29th, at the Bellefonte Country Club, Ashland

Each meeting is preceded by an open cash bar at 5:30 p.m. and dinner at 6:00 p.m.; the seminar begins at 7:00 p.m. Programs and reservation forms are now being mailed to KMA members and their spouses, and further information can be obtained from each of the above county medical societies or from KMA Headquarters office.

Arthur H. Keeney, M.D., dean and professor of ophthalmology at the University of Louisville School of Medicine, was named the 13th Annual Samuel D. McPherson Lecturer in Ophthalmology at the University of North Carolina, Chapel Hill, where he lectured on injuries from photochromic glass.

Carlo H. Tamburro, M.D., has been named associate professor and chief of the Digestive Diseases and Nutrition Section, Department of Medicine, University of Louisville School of Medicine. He will also serve as project director of a medical surveillance program and coordinate research efforts aimed at studying the problems of liver disorders associated with exposure to certain industrial chemicals.

The Perinatal Coordinating Center and 24-hour "Perinatal Hotline" was recently established at the Perinatal Medical Center in Louisville General Hospital, under the auspices of the University of Louisville School of Medicine's Department of Obstetrics and Gynecology. The service will be available for education, referrals, coordination of treatment, emergency services and professional advice.

T. R. Davies, M.D., Barbourville, retired from his family practice December 31, 1974, after almost 43 years of service. Doctor Davies is currently Chairman of the Knox County Board of Health.

"FEELING GOOD", a series on Public Broadcasting Service TV stations, conveys information on good health practices through entertainment techniques. Topics to be covered in the next month's programming include:

February 12—Heart disease, accident prevention, medical emergencies, and preschool screening

February 19—Exercise, parenting, alcohol abuse, and patients' rights

February 26—Patients' rights, heart disease, prenatal care, and immunization

March 5—Cancer, doctor/patient communication, mental health, and nutrition

St. Joseph Infirmary opened its new **Angiographic-Cardiovascular Laboratory,** a unit to facilitate cardiac catheterization and coronary angiography.

The American Physicians Art Association invites physicians to become members of this national non-profit organization which is dedicated to furthering art interests of the medical profession. For information, contact Victor C. Laughlin, M.D., President of APAA, 3270 Green Road, Cleveland, Ohio 44122.

In Memoriam

CLINTON C. COOK, M.D.
Louisville
1909-1974

Clinton C. Cook, M.D., died December 30, 1974 at the age of 65. An obstetrician, Doctor Cook graduated from the University of Louisville School of Medicine in 1936. He was a member of the Kentucky Medical Association, the American Medical Association, and the Jefferson County Medical Society.

HARRY G. HERRING, M.D.
Lexington
1885-1975

Harry G. Herring, M.D., 89, died January 7, 1975. He graduated from the Medical Department of the University of Michigan in 1911, and was an orthopedic surgeon. A past president of the Fayette County Medical Society, Doctor Herring was also an emeritus member of the Kentucky Medical Association.

How Much Are We Exposed To?
Continued from page 99

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PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension
Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp.=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

One prescription can economically treat the entire family.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Pinworms, roundworms controlled with a single, non-staining dose of

ANTIMINTH®

(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

*Data on file at Roerig.

Please see prescribing information on facing page.

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Medical, Surgical & Laboratory Equipment
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17 YEARS EXPERIENCE IN THIS FIELD

IMPORTANT INFORMATION: *This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdosage or individual hypersensitivity, reactions similar to those after meperidine or morphine overdosage may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Nalline® (nalorphine HCl) or may be evidenced as late as 30 hours after ingestion. LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.*

Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria and paralytic ileus.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. Use a narcotic antagonist in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. *Liquid,* 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

SEARLE **Searle & Co.**
San Juan, Puerto Rico 00936

Address medical inquiries to:
G. D. Searle & Co.
Medical Department, Box 5110,
Chicago, Illinois 60680

454 R

When diarrhea has his number...



Lomotil puts him back in the game.

Physicians and patients both want prompt control of the symptoms of diarrhea. A rapid, uncontrolled loss of fluids and electrolytes can cause a medical crisis, particularly in children, and in patients who are seriously ill, or in people who are badly undernourished.

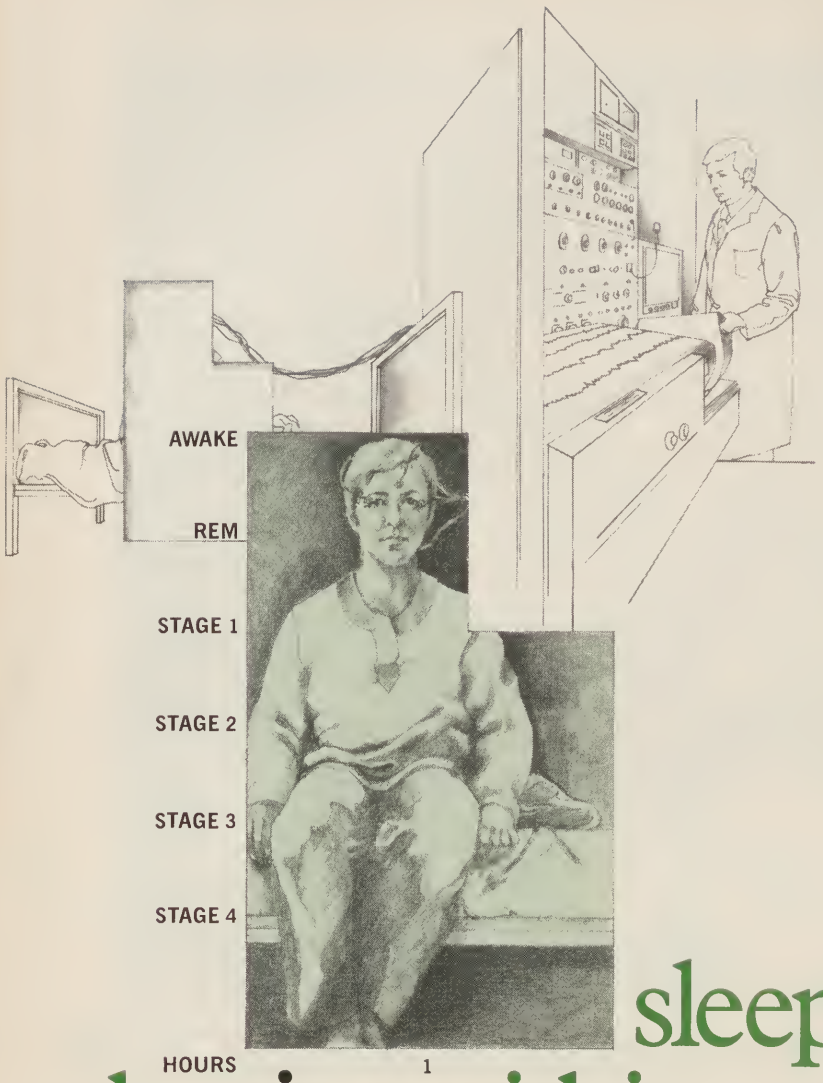
Lomotil usually stops diarrhea promptly. This rapid action halts the emergency aspect of diarrhea and is comforting and reassuring to the patient. Electrolyte and fluid losses can be corrected while the specific cause of the diarrhea is being determined. If an infective agent is the cause, appropriate antibiotic therapy should be given along with Lomotil.

Lomotil has few side effects, and those that do occur are generally mild.

Lomotil®
TABLETS/LIQUID

Each tablet and each 5 ml. of liquid contain:
diphenoxylate hydrochloride ..... 2.5 mg.
(Warning: May be habit forming)
atropine sulfate ..... 0.025 mg.

Usually stops diarrhea promptly.



sleep begins within 17 minutes, on average...

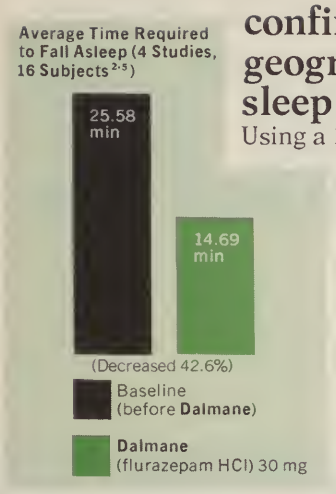
an initial benefit of

Dalmane®

(flurazepam HCl)

proved by a 22-night clinical study of insomnia patients in the sleep research laboratory and at home[1]

Three insomnia patients selected for difficulty falling asleep were administered Dalmane (flurazepam HCl) 30 mg for 14 consecutive nights. Placebo was given for four nights prior to and four nights after Dalmane. Physiologic tracings on Dalmane nights 1-3 showed sleep induction time averaged 13.90 minutes; on Dalmane nights 12-14, 18.80 minutes. Combined average for the 6 monitored drug nights was 16.35 minutes.[1]



confirmed by clinical studies in four geographically separated sleep research laboratories[2-5]

Using a 14-night protocol involving eight insomniac and eight normal subjects, four studies confirmed the sleep-inducing effectiveness of Dalmane (flurazepam HCl) and the reproducibility of this response. On average, one 30-mg capsule induced sleep within 17 minutes. In all these studies, Dalmane induced sleep rapidly, reduced nighttime awakenings, and provided 7 to 8 hours of sleep without repeating dosage[2-5]

Dalmane (flurazepam HCl) induces and maintains sleep, with relative safety

Dalmane is generally well tolerated; morning "hang-over" has been relatively infrequent. While dizziness, drowsiness, lightheadedness and the like have been noted most often, particularly in the elderly and debilitated, physicians should be aware of the possibility of more serious reactions, as noted below.

Before prescribing Dalmane (flurazepam HCl), please consult Complete Product Information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

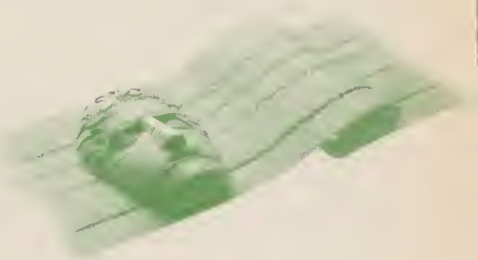
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.



when restful sleep is indicated

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.* — usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.* — initial dosage for elderly or debilitated patients.

- induces sleep within 17 minutes, on average
- reduces nighttime awakenings
- sustains sleep 7 to 8 hours, on average, without repeating dosage

REFERENCES: 1. Kales A, *et al*: *Arch Gen Psychiatry* 23:226-232, Sep 1970
2. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
3. Frost JD Jr: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ
4. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ
5. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc, Nutley NJ

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Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

KEEP THE HYPERTENSIVE PATIENT ON THERAPY KEEP THERAPY SIMPLE WITH DYAZIDE®

Trademark

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Just 'Dyazide' once daily or twice daily
No inconvenient potassium supplements
Nor special K^+ rich diets needed as a rule



Two prime reasons patients drop out of hypertensive therapy are (1) the patient failed to understand directions, and (2) the regimen was overly complicated. Dosage is simple with 'Dyazide', easily understood, once or twice daily, depending on response. There's no need to complicate the regimen with potassium supplements or unwieldy potassium-rich diets.

SK&F CO.
Carolina, P.R. 00630
Subsidiary of
SmithKline Corporation

TO KEEP BLOOD PRESSURE DOWN AND KEEP POTASSIUM LEVELS UP

The Bactrim™ edge

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

A high assurance of clinical efficacy

- in cystitis, pyelonephritis and pyelitis diagnosed as chronic
- against susceptible strains of the common urinary tract pathogens, usually *E. coli, Klebsiella-Enterobacter, Proteus mirabilis,* and, less frequently, indole-positive proteus species.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Enterobacter, Proteus mirabilis,* and, less frequently, indole-positive proteus species).

Note: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in chronic and recurrent urinary tract infections.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia in elderly patients on diuretics, primarily thiazides. Sore throat, fever, pallor or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. Data are insufficient to recommend use in infants and children under 12.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, allergy or bronchial asthma; and in those with glucose-6-phosphate dehydrogenase deficiency, where hemolysis may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12.

Usual adult dosage: Two tablets b.i.d. for 10 to 14 days. For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

Supplied: Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10.

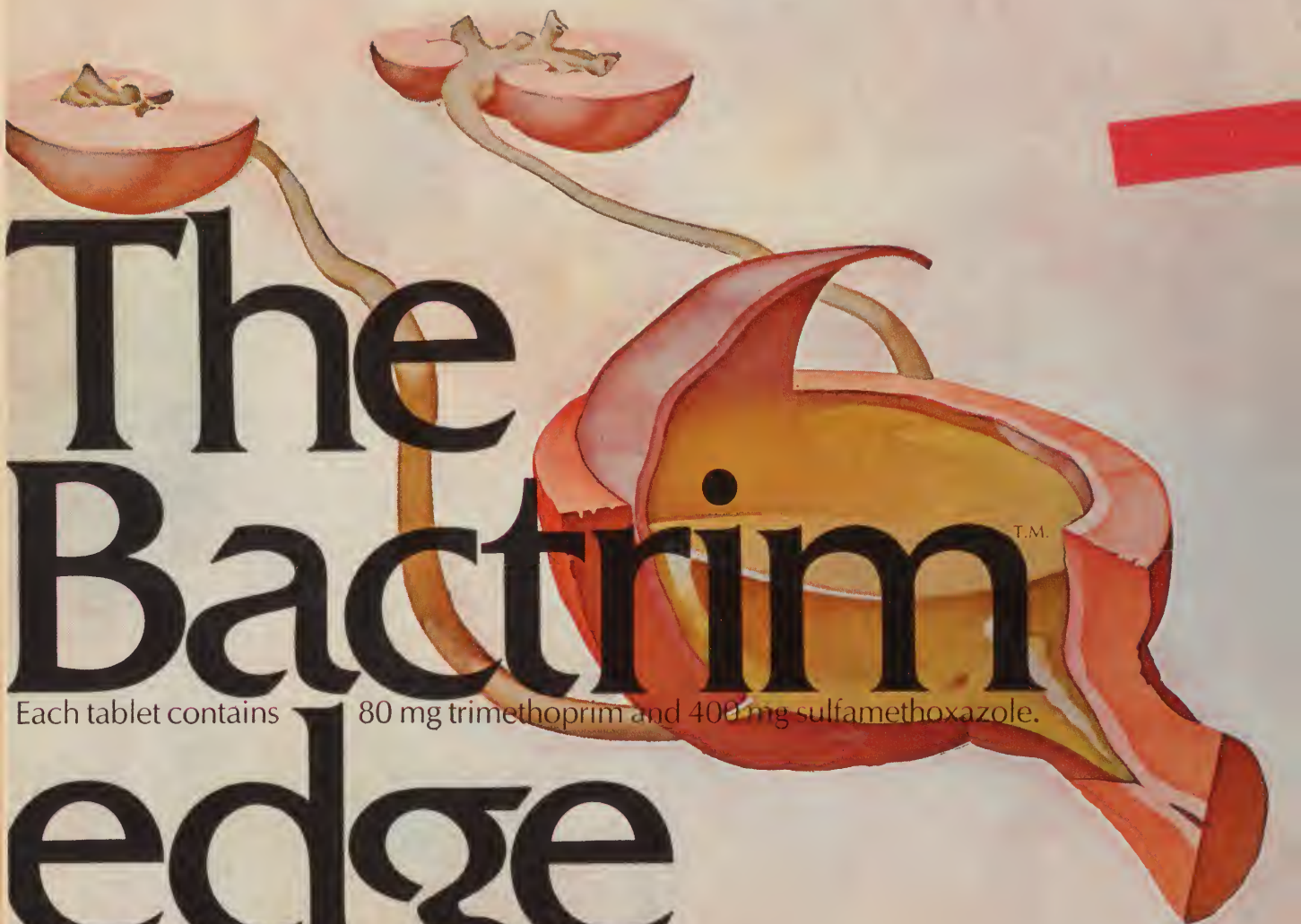
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Bactrim™

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

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The Bactrim™ edge

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

A high assurance of antibacterial activity
in cystitis, pyelonephritis and pyelitis diagnosed as chronic and due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which appears on preceding page.

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The Journal of The KENTUCKY Medical Association

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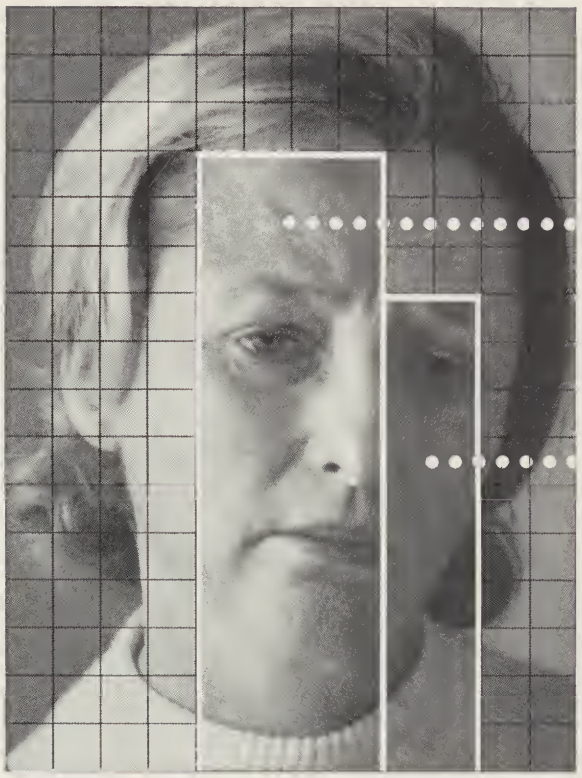
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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Nutley, New Jersey 07110

The MUDRANES

Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarhital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23261

Volume 73 • March 1975

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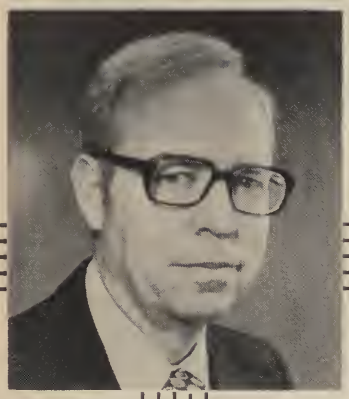
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MESSAGE FROM THE PRESIDENT



Two To

Our time at present is described in many ways—Space Age—Auto Age—Consumerism —Environmentalism—Suburbia—Supersalesmen—Materialists, and of course the Age of Communication.

Each of these require more than one to tango. With no worry of refutation, it for sure takes two where communication is concerned.

The ability to portray a message demands at least one to send and one to receive. If you have gotten this far, you and I are doing well. It makes no difference how valuable the message or the excellence of content; it matters only if one receives.

Conversely, despite the eagerness of one to learn, accept or to be informed, a dull, unimaginative or poorly organized deliverance will soon retard and then turn away focus and attention span.

When it comes to organization and particularly large ones, they find much frustration in the communication process. By production of the supposedly most surefire methods of reaching and informing the membership, it is still easy to find voids in transmission and, with a commonness far too noticeable, little evidence that a great deal has been imprinted upon the mental state of a yearned-for informed constituency.

Here are a few more acknowledged truths amongst those who hope to inform. 1. The written word is widely read in papers, magazines, and books but poorly reacted to as a means of communicating. 2. It should be short, sweet, concise and if possible confined to one page. 3. Better attention is attained if a moderately undressed woman is near the message. 4. The offering of statistics will quickly progress from snores to stupor. 5. Unless the group's collective ox is being gored, a distressing percentage care not what prevails generally amongst the brotherhood (or personhood). 6. If possible, it should be as humorous as time and space will allow. 7. People place small value on that which costs little. 8. Show as many pictures and mention as many names as good conscience can attempt. 9. Color it bright and package it light. 10. Watch out what is said; almost anything will offend someone. 11. Usually accusations and condemnations will bring more readership than praise. 12. If, despite all the best possible efforts to enlighten, it is still said by many that little is comprehended and suspect conspiracy or failure of mission or foul deeds, it means they have not plugged in their receivers.

Where are we going with all this? Just here. We can not be sure, if we have not joined ourselves in a partnership of communication. It takes two. If we have not participated well on one side or the other as the sender or the receiver, the failure does not reside afar. Its abode is here within.

May the golden bird of knowledge rest upon your shoulder and fill your subliminal with nothing but silver thoughts of wisdom.

Hoyt Gardner

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

MARCH

15 12 Symposium on Oropharyngeal Cancer,* HSC Auditorium, UL School of Dentistry and School of Medicine

18 New Frontiers in Pediatrics, Norton-Children's Hospitals auditorium, 6:00-7:30 p.m.

19-20 21st Annual Symposium on Cardiovascular Diseases, HSC Auditorium, UL

22 Histology Seminar, Kentucky Society for Histotechnology, Health Sciences Building, UL, 8:00 a.m.-4:00 p.m.

26 "Disseminated Intravascular Coagulation"**, Methodist Evangelical Hospital, Louisville, 7:00-9:00 p.m.

APRIL

3 "Advances in Management of Coronary Artery Disease", The Lexington Clinic, Lexington

9 Retinoscopy Course***, Continuing Education Center for Health Sciences, UK, Lexington. Fee: $100

9-10 "The Injured Child", Spring Meeting, Kentucky Chapter, American Academy of Pediatrics, Holiday Inn, Somerset

10-11 Current Concepts in Ophthalmology and Neurophthalmology***, UK, Lexington. Fee: $80

24-26 Seminar on Law & Medicine***, UK Law Building Auditorium, Lexington. Fee: $65

24-26 "Diagnosis and Management of High Risk Pregnancy"**, HSC Auditorium, UL

26-29 Modern Management of Major Problems in Surgery**, Galt House, Louisville

MAY

5 Louisville Radiological Conference**, HSC and Galt House, Louisville

8 11th Annual Symposium on Rheumatic Diseases, HSC Auditorium, UL

12-16 Pediatric Radiology***, Lexington Hilton Inn, Lexington. Fee: $225

14-16 Symposium on Genitourinary Radiology***, Lexington Hilton Inn. Fee: $225

15-17 24th Annual KAFP Scientific Session, Ramada Inn/Bluegrass Convention Center, Louisville

27-28 Seminar on Alcoholism, Executive Inn, Louisville

JUNE

4-5 5th Annual Emergency Health Care Seminar, Executive Inn, Louisville

IN SURROUNDING STATES

MARCH

19 "Professionals' Hangups in Treatment and Rehabilitation of Alcoholics", Medical Sciences Building, University of Cincinnati

20-21 Conference on Medical Malpractice Insurance, Sheraton National Inn, Arlington, Va

26 "Care of the Critically Ill Child", Children's Medical Center, Dayton, O. Fee: $20

APRIL

2-4 "Occupational Lung Disease", West Va. University School of Medicine, Morgantown. Fee: $100 (ACCP members)

9-11 "Asthma and Hypersensitivity Lung Disease", Veterans Administration Hospital, Cleveland, O. Fee: $100 (ACCP & ATS members)

21-24 American College of Surgeons Spring Meeting, Regency Hyatt House & Marriott Motor Inn, Atlanta

21-24 "Recent Advances in Allergy", The Homestead, Hot Springs, Va

21-25 "Recent Progress in Endocrinology", University of Michigan Medical Center, Ann Arbor

23-25 Pulmonary Radiology, Indiana University School of Medicine, Indianapolis. Fee: $125

24-26 "Gastroenterology for Practicing Physicians", Meharry Medical College, Nashville

MAY

14-15 10th Annual Indiana Multidisciplinary Child Care Conference, Stouffer's Indianapolis Inn

27-31 Diagnostic Roentgenology, Cincinnati General Hospital

29-31 Microneurosurgery Symposium, Cincinnati Convention Center

JULY

23-Aug. 1 "Human Sexuality", Institute for Sex Research, Indiana University, Bloomington. Fee: $285

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Breast Cancer: earlier warning system

Futility and frustration beset the physician confronted with breast cancer. For the last 35 years, the survival rate has not significantly changed despite intensive educational programs aimed at earlier detection, and improvement in treatment techniques.

What is the outlook? We know the key to reducing mortality from breast cancer is in the *earliest possible* diagnosis. The stage at which breast cancer is detected is *crucial* to the outcome of treatment. By the time a lump is discovered through BSE or clinical examination, critical time may have been lost.



Mammography



Thermography

And we *do* have the means to achieve earlier diagnosis. We do have an *earlier* warning system. Mammography and thermography can detect breast cancer *before* a lump is discernible by palpation. To demonstrate that it is practical and feasible to detect breast cancer earlier by using these modalities, the American Cancer Society and the National Cancer Institute are funding a network of breast cancer demonstration projects. Supported by grants of $2-million from the ACS and $4-million from the NCI, 20 such centers are expected to be operative across the country by the end of the year. Each will screen at no charge, approximately 5,000 women annually, in what is considered to be the ideal detection program—to include clinical examination, mammography and thermography. Each of these detection methods contributes independently to the detection of breast cancer, and none can be dispensed with in the search for early disease.

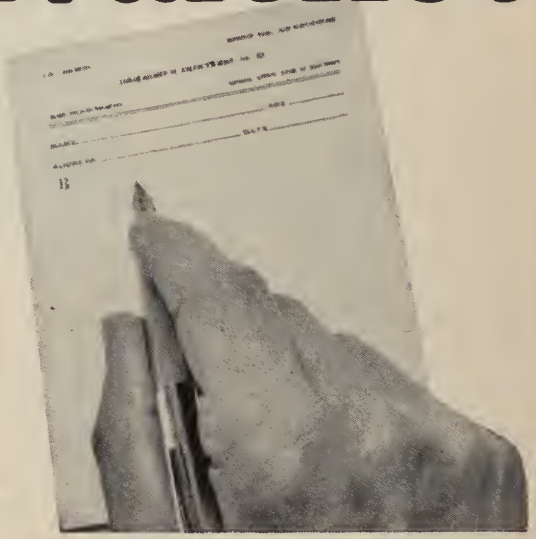
At present we cannot prevent breast cancer, but the potential for saving more lives is immense. The five-year survival rate surges dramatically from 53% when axillary nodes are positive, to approximately 85% when the disease is localized, to nearly 100% for in-situ cancer.

We have an earlier warning system. Let's use it.

® american cancer society



Bioequivalence



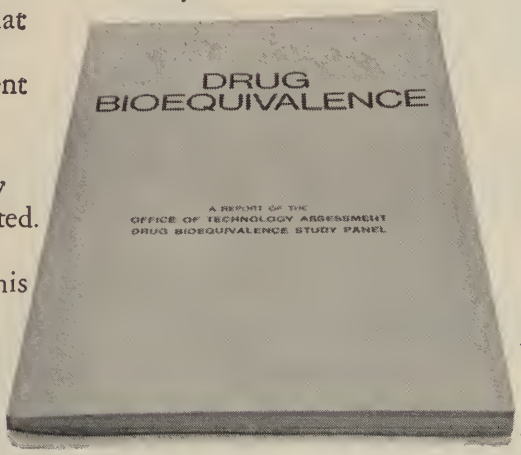
the weight of scientific opinion:

If the pharmacist substituted a chemically equivalent drug for the one you have specified for your patient—could you be certain of that product's safety and effectiveness simply because the chemical content was the same?

Definitely not, unless bioequivalence tests and other quality assurance checks had been conducted. The pharmaceutical industry and many scientists have maintained this position for years, but others have questioned it. Now the Office of Technology Assessment of the Congress of the United States has reported on the issue in its Drug Bioequivalence Study.*

Here are a few definitive statements in the O.T.A. report:

"...the problem of bioinequivalency in chemically equivalent products is a real one. Since the studies in which lack of bioequivalence was demonstrated involved marketed products that met current compendial standards, these documented instances constitute unequivocal evidence that neither the present standards for testing the finished product nor the specifications for materials, manufacturing process, and controls are adequate to ensure that ostensibly equivalent drug products are, in fact, equivalent in bioavailability.



"While these therapeutic failures resulting from problems of bioavailability were recognized and well documented, it is entirely possible that other therapeutic failures and/or instances of toxicity that had a similar basis have escaped attention."

The Pharmaceutical Manufacturers Association supports federal legislative amendments that would require manufacturers of duplicate prescription pharmaceutical products, subject to new drug procedures, to document:

(a) chemical equivalence; and

(b) biological equivalence, where bioavailability test methods have been validated as a reliable means of assuring clinical equivalence; or

(c) where such validation is not possible, therapeutic equivalence.

In addition, the PMA supports federal legislation that would require certification of all manufacturers of prescription products before they could start in business, annual inspections and certification thereafter, and strict adherence to FDA regulations on good manufacturing practices.

The overall quality of the United States drug supply is excellent. But only a total quality assurance program, envisaged in these and other policy positions adopted by the PMA Board of Directors in 1974, can bring about acceptable levels of performance by all prescription drug manufacturers and thereby assure the integrity of your prescription...

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

*Copies of the complete report on Drug Bioequivalence may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

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The JOURNAL of the
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VOLUME 73 MARCH 1975 No. 3

Mycosis Fungoides—Case Report†

ULLIN W. LEAVELL, JR., M.D., IRA P. MERSACK, M.D.,
JAMES L. JOHNSON, B.S., AND DANIEL BUTLER, B.S.*

Lexington, Kentucky

A patient with mycosis fungoides responded well to combined cyclic chemotherapy of Cytoxan, Oncovin, and prednisone (COP). The condition cleared completely after three months and the patient has remained asymptomatic for more than one year. During this period he received a total of 19 courses of COP.

MYCOSIS fungoides is a lymphoma characterized by red, scaling, weeping lesions, plaques and skin tumors. It was first described by Alibert[1] in 1806. It can involve the skin for a period varying from months to 15 years before affecting lymph nodes and internal organs.

Males are involved twice as frequently as females, and the diagnosis of mycosis fungoides is usually made in the fifth decade with a history of skin lesions arising 6-10 years earlier. The etiology of the disease is unknown; however, many patients relate its onset to a drug or allergic reaction.

The signs and symptoms of mycosis fungoides change as the disease progresses. The initial stage consists of poorly-defined, scaling, erythematous lesions which grossly can be mistaken for psoriasis or eczematoid dermatitis. Lesions may regress spontaneously. With increasing cellular infiltration they become elevated, forming the plaque stage. Pruritus is at its greatest intensity during the initial and plaque stages. After a course of from 5-15 years, the plaques develop into tumors which may ulcerate. Vidal[2] described the d'Emblee form of mycosis fungoides in which tumors develop from normal skin. An exfoliative erythroderma can appear as the sole cutaneous involvement or can be associated with any of the three stages.

Mycosis fungoides can involve all organ systems; in a study by Epstein et al.[3] of 75 autopsy patients, the skin, lymph nodes, spleen, lungs, and liver were most often involved.

Mycosis fungoides can develop into other malignancies. Cyr[4] and his group reported a series of 165 cases of mycosis fungoides of which 106 patients died; 34% of the deceased developed reticulum cell sarcoma, lymphosarcoma, or Hodgkin's disease. A number of the patients with reticulum cell sarcoma or lymphosarcoma developed leukemia.

The cause of death in 50% of the cases is infection. Fitzpatrick[5] reports that death usually occurs within three years after palpable lymphadenopathy develops, regardless of the histopathology of the nodes.

The cell infiltrate has been of great interest to many investigators since the description of the Sezary cell in 1938. Sezary[6-9] described "cellules monstreuses" in the blood and skin of patients with generalized erythema, leonine facies, lymphadenopathy and hepatosplenomegaly. This became known as the Sezary syndrome. Tedechi and Lansinge[10] thought the Sezary syndrome was a variant of mycosis fungoides and not always benign in nature as originally described in the literature.

---

†*Patient presentation and discussion at Medical Grand Rounds, September 6, 1974*

**Division of Dermatology, Department of Medicine, University of Kentucky Medical Center, Lexington*

Lutzner and Jordan[11] described a cerebriform appearance of the nucleus in the Sezary cell and reported the same abnormal cell in patients with mycosis fungoides. Sandbank[12] showed by electron microscopy intranuclear inclusions in the Lutzner cell in mycosis fungoides and in the Sezary syndrome. Lutzner et al.[13] found the mycosis fungoides cell in mycosis fungoides, the Sezary syndrome, and also parapsoriasis en plaque. They thought that the presence of the cell was not absolutely specific for the diagnosis of mycosis fungoides.

In 1971, Petrozzi et al.[14] found Lutzner cells in a patient with reticulum cell sarcoma and felt that it was not a specific indicator of mycosis fungoides. Flaxman et al.[15] found mycosis fungoides cells in lupus erythematosus, vasculitis, lichen planus, psoriasis, solar keratosis and basal cell carcinoma. They thought the cell was not diagnostic of the Sezary syndrome or mycosis fungoides, and that it could be a premalignant cell or a nonmalignant cell with certain functions.

Brouet et al.[16] showed that only Sezary cells revealed properties of T-cells. In 1973, Lutzner et al.[17] described a small cell variant of the Sezary cell. Later, Lutzner et al.[18] reported that the small cell variants had properties of T-cells. Edelson et al.[19] described T-cell membrane properties of mycosis fungoides cells, Sezary cells, and cells with erythroderma and lymphocytic leukemia.

The treatment of mycosis fungoides has also stimulated a great deal of interest and there have been many new means of bringing about remissions. Superficial X-ray was used for many years and was effective in small doses; however, after many applications, patients became resistant to this therapy.

In 1947, Kierland et al.[20] found that nitrogen mustard administered intravenously greatly improved five patients with mycosis fungoides. Sipos and Jakso[21] cited good results by painting nitrogen mustard on lesions of three patients with mycosis fungoides. This method is very effective, simple, non-toxic, and is used by many dermatologists today.

Haserick et al.[22] confirmed the effectiveness of painting nitrogen mustard on mycosis fungoides lesions in 1959. In 1965, Sipos[23] reported that the erythema of phase 1, the plaque of phase 2, and the ulcerated lesions of phase 3 responded to painting with nitrogen mustard. Non-ulcerated tumors did not respond. Some patients develop hypersensitivity to topical nitrogen mustard. In 1967, Waldorf et al.[24] reported that patients who developed sensitivity to topical nitrogen mustard could be desensitized by small intravenous doses of the drug.

The effectiveness of intralesional injections of nitrogen mustard was described by VanScott and Winters[25] in 1970.

Cytoxan intravenously was reported by Abele and Dobson,[26] VanScott et al.[27], Maguire,[28] and Auerback[29] to be beneficial in treating mycosis fungoides.

Corticosteroids have been reported to be effective orally by Hurley and Koplon[30], intralesionally by Tuffanelli,[31] and topically by Farber et al.[32]

The electron beam is another effective method of in treating mycosis fungoides, as indicated by Bagshaw et al.[33] and Fromer et al.[34]

Azaribine and bleomycin are also of value in treating the condition as reported by Blast et al.[35] and McDonald and Calabresi.[36]

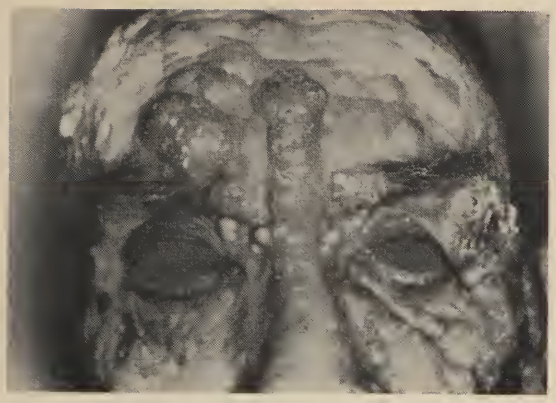
Combined cyclophosphamide, vincristine and prednisone therapy has been shown by Hoogstraten et al.[37] and Luce et al.[38] to increase significantly the complete and partial remission rate in patients with lymphoma over that achieved with single agent treatment. Spiegel and Coltman[39] documented a 50% reduction in desquamation and erythroderma after five courses of COP in a patient with mycosis fungoides. There was eventual exacerbation of the disease after 17 courses of COP.

TRADE NAME	GENERIC NAME
Cytoxan	cyclophosphamide
Oncovin	vincristine sulfate
Leukeran	chlorambucil

Case Report

A 70-year-old white male carpenter was admitted to the University of Kentucky Medical Center in March, 1973, because of generalized pruritus, redness, and scaling of 11 years' duration. Three years previously he was diagnosed as having neurodermatitis. Six months prior to admission he developed 20-30 nodules and tumors over his torso and extremities.

Physical examination revealed generalized redness and scaling of the entire body (Fig. 1).



Nodules and tumors over the forehead
FIG. 1



The nodules and tumors over the forehead cleared following COP cyclic chemotherapy leaving only epidermoid cysts
FIG. 2

There were many nodules and tumors, measuring 0.5 to 5.0 cm in diameter, over his torso, arms, and legs. The liver, spleen, and lymph nodes were not enlarged.

The following laboratory tests were within normal limits: complete blood count, urinalysis, fasting blood sugar, sodium, potassium, chloride, carbon dioxide, blood urea nitrogen, creatinine, creatinine clearance, alkaline phosphatase, SGOT, SGPT, bilirubin, albumin, chest X-ray, intravenous pyelogram, lymphangiogram, gallium scan, liver-spleen scan, electrocardiogram, and bone marrow.

Skin biopsy showed a pleomorphic dermal and subcutaneous infiltrate consisting of lymphocytes, eosinophils, reticulum cells, and histiocytes compatible with mycosis fungoides.

The patient was given COP on April 7, 1973, consisting of Cytoxan, 1.0 gm IV first day, Oncovin, 2.0 gm IV first day, and prednisone, 60 mg daily for 5 days. He received COP every two weeks for five courses, at which time he developed generalized weakness, and the drugs were temporarily discontinued.

The erythematous scales, nodules, ulcers, and tumors cleared by July 31, 1973 (Fig. 2). The patient subsequently received a total of 14 courses of COP over 12 months. For the past three months he has been maintained on prednisone and chlorambucil with no recurrence of the skin lesions and no evidence of internal involvement.

Discussion

Many therapeutic agents have been found to improve the condition of patients with mycosis fungoides. Combined chemotherapy is preferable to a single agent in treating lymphomas inasmuch as it produces a higher percentage of complete remissions and a longer interval between relapses. The extent to which intensive chemotherapy prolongs survival in patients with non-Hodgkin's lymphoma is not yet known.

Our patient improved dramatically during COP chemotherapy; the erythema, scaling, nodules and tumors disappeared within three months of the time therapy was started. He was maintained on COP, receiving 19 courses of therapy over a 12-month period. During this time there was no recurrence of his cutaneous problem, nor was there any indication of systemic involvement.

Since there are scant reports of mycosis fungoides treated by this modality, we deemed the spectacular improvement in our patient worthy of recording.

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Melanosis Coli with Liver Involvement

Louis D. Dubilier, M.D. and Robert C. Burkhart, M.D.*

Lexington, Kentucky

This is a report of the association of melanosis coli with similar pigmentation in the reticuloendothelial system of the liver which produced abnormal liver function tests. After discontinuance of the cascara sagrada which the patient had been taking for five years, the pigmentation in the large bowel and the liver and the abnormal liver function tests disappeared.

MELANOSIS coli, first described by Cruveilhier[1] in 1829, is a reversible condition in which there is an abnormal pigmentation in the mucosa of the colon. Since Virchow[2] coined the term in 1857, the condition has remained a medical curiosity. The purpose of this paper is to review briefly this subject, and to report a patient with abnormal liver function tests in the presence of similar pigment in the Kupffer's cells of the liver which disappeared after abstinence from cascara sagrada.

Case Report

A 42-year-old Caucasian female, gravida 3, para 2, abortus 1, was admitted to the Central Baptist Hospital on April 3, 1970, for unexplained weakness, anorexia, nervousness, insomnia and lethargy of two months duration. There was no dark urine, putty-colored stools or itching. There was no exposure to toxins or hepatitis and she had not received blood transfusions or iron. Her medications consisted of diazepam (Valium 5 mg two times daily) for a few weeks, and quinidine gluconate (0.33 gm per day) for more than eight years for a history of intermittent tachycardia, which has never been documented. She refused to abstain from this "heart medication". For five years prior to admission she had taken five cascara sagrada tablets every other day for constipation. She had received intermittent small doses of several other medications for brief periods of time between 1965 and 1967, including propoxyphene HB1, meprobamate, hydroxyzine, pentobarbital, amitriptyline, chlorpromazine, and paraldehyde.

In the past she had had several episodes of severe anxiety in addition to several periods of alcohol excess. No history of alcoholic excess could be elicited prior to this present admission. Following severe emotional trauma in 1958, she ceased to menstruate at age 29. She had received therapeutic levels of penicillin on six occasions in the past because of a reactive VDRL and positive fluorescent treponema antibody absorption test.

On physical examination she was well nourished and appeared older than her stated age. There was no scleral icterus nor was her thyroid enlarged or tender. Her breasts were slightly atrophic and her heart and lungs were normal. No hepatomegaly was evident. Her uterus, ovaries, and vaginal mucous membranes were involutional. Her weight was 56 kg, height 165 cm, pulse 104 per minute, blood pressure 84/69 mm Hg and temperature 98°F.

Laboratory data included a protein bound iodine of 3.8 mcg/100 ml, T-3 28.8%, prothrombin time 12 seconds (control of 11.5 seconds), and a negative heterophil agglutination. Urine analysis demonstrated a specific gravity of 1.005, pH 5 with no albumin, sugar, bile, ketones, pus, blood or casts. The hemoglobin was 14.1 gm/100 ml; the white blood cell count was 5,200 per ml with 53% polymorphonuclear leukocytes, 42% lymphocytes, and 5% monocytes. The sedimentation rate was 19 mm/hour. The bilirubin was 1.5 mg/100 ml (normal, 0.1-1 mg/100 ml), alkaline phosphatase 150 u (normal, 25-75), and serum glutamic oxalacetic transaminase level (normal 10-50) was slightly elevated to 125 u using the SMA 12/60. Bromosulphalein (BSP) retention was 12% in 45 minutes and 5% in two hours. The serum iron was 127 mcg per 100 ml and the total iron-binding capacity was 246 mcg per 100 ml. The liver scan had minimal decreased activity in the left lobe and porta hepatis. An electrocardiogram, upper gastrointestinal x-ray series, cholecystogram and chest x-ray were normal. A 24-hour urine volume of 1860 ml contained over 100 MUU of follicle-stimulating

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hormone (normal Adult 6-50 MUU per 24 hours). Because of the abnormal liver function tests, a percutaneous liver biopsy was done. The gross specimen of liver tissue was pitch black. On the basis of the microscopic changes noted in the liver specimen, examination of the rectum was recommended. On proctoscopic examination, melanosis coli was found and proven by microscopic examination of the biopsied rectal mucosa.

Since her release from the hospital she has taken sodium levothyroxine (Synthroid), 0.1 mg/day, diazepam (Valium), 10 mg three times daily, and conjugated estrogens, 1.25 mg daily. She has abstained from alcohol and the use of cascara sagrada. Her presenting symptoms have disappeared. On subsequent proctoscopic examination on May 22, 1972, islands and streaks of dark pigmentation were seen, the pigment comprising about 75% of the mucosa. The rectal mucous membrane was entirely normal at proctoscopy on May 29, 1974.

Pathology

The gross specimen received in the laboratory consisted of a needle biopsy of black liver with the suggested diagnosis of Dubin-Johnson syndrome. Microscopically the most striking abnormality was the presence of large amounts of finely-granular, brownish pigment localized to the Kupffer's cells, which were hypertrophied and in many places formed clusters (Fig. 1). A slight lymphocytic exudate was present in these areas of clustered Kupffer's cells. The non-enlarged portal areas contained pigment-containing macrophages associated with a slight lymphocytic exudate. No pigment was present in hepatocytes. Prussian Blue stains were negative indicating this pigmentation was not iron. Bleaching with chlorax produced a definite decrease in the brown color in the Kuppfer's cells. Fontana-Masson stain produced intense blackening in a distribution corresponding to the distribution of Kupffer's cells. Bile stain was negative. The pigment was also negative by acid-fast stain. All of these procedures are compatible with the melanin-like pigment described in melanosis coli. In the rectal biopsy (April 18, 1970), there were many clusters of macrophages containing finely-granular pigment restricted to the lamina propria (Fig. 2). This pigment was similar to that present in the liver. No epithelial abnormalities were identified. The repeat liver biopsy on March 23, 1972, showed a marked decrease in the number of pigmented cells and a decrease in concentration of pigment within the involved Kupffer's cells. The liver was otherwise normal histologically. The last liver biopsy on January 17, 1974, revealed no identifiable pigment and a normal liver microscopically (Fig. 3).

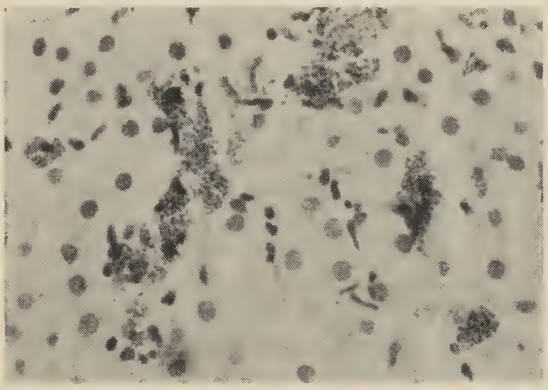


FIG. 1 (600x magnification) Black granular pigment located in single and clustered Kupffer's cells of the liver in first biopsy

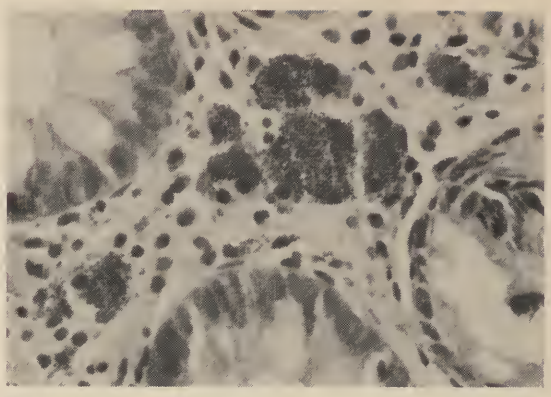


FIG. 2 (600x magnification) Similar black granular pigment in macrophages in lamina propria of the rectum

Discussion

Melanosis coli is a not uncommon condition of the colon with the incidence of macroscopic coloration varying between 1%[3] to 11% of routine autopsies. Microscopic examination of the colon increased the latter incidence to 34.9%.[4] It is thus more commonly seen only with the microscope. It is commonest between the ages of 30 and 60 with conflicting reports about sex predominence. The disorder in itself produces no intestinal symptoms. Any symptoms which may occur are due to the accompanying condition, usually long-standing functional colonic stasis. In closely-observed patients, Speare[3] noted that the shortest time for the development of melanosis after the institu-

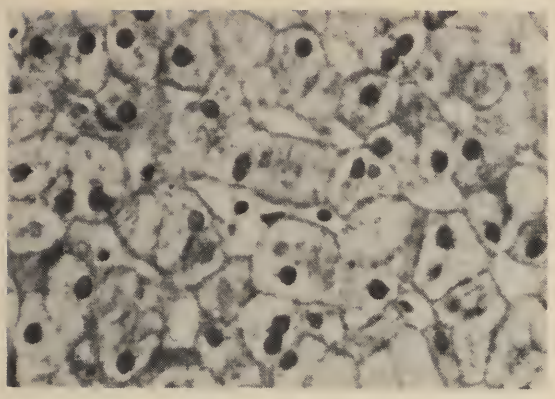


FIG. 3 (600x magnification) No evidence of residual pigment in Kupffer's cells of the liver after four years of abstinence from cascara sagrada

tion of an anthracene cathartic, as viewed through a proctosigmoidoscope, was four months, and the longest, 13 months. After withdrawal of these cathartics the shortest time for the disappearance of the pigmentation was five months and the longest 11 months.

Melanosis may involve any area of the large intestine from the ileocecal valve to the anorectal line. From autopsy studies[5] the most frequent site of pigmentation is the cecum, and the rectosigmoid and cecum often showed an equally intense color, decreasing gradually in intensity from both sides as the transverse colon is approached. Macroscopically the pigmentation usually ends abruptly at the ileocecal valve, although microscopically small numbers of pigmented cells may often be seen in the terminal ileum mucosa. Two cases of true melanosis of the ileum were recorded by Roden.[5] The appendix is also frequently involved. Macrophages containing pigment similar to that seen in the mucosa of the colon have also been described in the draining lymph nodes of the mesocolon.[4,6]

The sigmoidoscopic appearance[4,5,7] is striking with areas of black-brown mottling of variable intensity varying in size between 2 to 10 mm and having an irregular, oval or polyhedral outline. These are usually separated by an irregular network of lines of a lighter shade. Confluence of small areas can produce larger patches. This appearance has been likened to "tiger skin". In spite of the striking color, the mucosa is smooth and glistening.

The etiology[7] of this disorder has not yet been elucidated. Probably the most important factors are prolonged colonic stasis, constipation, and obstipation associated with constant ingestion of anthracene laxatives such as cascara sagrada, senna, aloes, rhubarb and frangula. Evidence suggests that the pigment is a melanin-like pigment or a lipofuscin.[4] Electron microscopically, the pigment granules show a very pleomorphic appearance and some contain a dense reticular material. It has been suggested that the pigment is located in lysosomes and are derived from breakdown products of intracytoplasmic structures such as endoplasmic reticulum and mitochondria.[4,11] The significance of the anthracene laxatives is unknown because, rarely, cases of melanosis have been described in patients who seldom take laxatives, and some people who take these laxatives for chronic constipation do not develop melanosis coli.[4]

The case under discussion is of special interest. Because of abnormal liver function tests which included increased bilirubin, alkaline phosphatase, serum glutamic oxalacetic transaminase and increased bromsulphalein retention at 45 minutes, a liver biopsy was performed. This grossly appeared pitch black and suggested the diagnosis of Dubin-Johnson disease. Microscopically the pigment was restricted to the Kupffer's cells which were hyperplastic and in clusters. None was seen in the parenchymal cells which negated the diagnosis of Dubin-Johnson disease, as did the return of the bromsulphalein level to normal at 2 hours. A proctosigmoidoscopy was suggested because this appeared to be phagocytized, pigmented material and because the intestinal tract was the most likely source. The diagnosis of melanosis coli was then made. The patient then discontinued the cascara sagrada which she had taken for the previous 5 years. She was followed for the next four years, and no evidence of abnormal liver function tests recurred. Subsequent biopsies of her rectum and liver demonstrated a progressive decrease in the amount of pigment in her liver, and the most recent liver biopsy in January, 1974, revealed no visible microscopic pigment.

Although it is not certain that the abnormal liver function tests present during her initial admission were related to the foreign pigment of the Kupffer's cells of her liver, it is quite likely that this is the explanation. The distribution of the pigmented cells is similar to that seen in the condition known as the "reticuloendothelial blockage".[9] No other abnormality was identified histologically to explain these

laboratory findings. The liver function studies returned to normal and have not recurred after abstinence from cascara sagrada, and were associated with the progressive decrease in pigment in her liver. The only reason for the lack of certainty is the history of alcoholic intake in the past which, if this had occurred immediately prior to admission, could have explained some of the abnormal findings. No history of this excess could be elicited.

In the literature only one reference to pigmentation of the liver in melanosis can be found, and this is only in the passing comment by Doctor Edward Gall during a seminar on liver disease.[10]

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The Central Anticholinergic Syndrome: Management with Physostigmine†

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Over 600 pharmaceuticals and plants with anticholinergic properties can produce a neuropsychiatric syndrome of psychotic proportions. The clinical features of this central anticholinergic toxicity are presented. This syndrome is rapidly reversed by physostigmine salicylate, but many physicians continue to be unfamiliar with its use. Guidelines for diagnosis and management are given.

INCREASINGLY physicians are seeing toxic states resulting from the use of drugs or ingestion of plants with anticholinergic properties. These compounds (Table 1) exert their anticholinergic effects primarily by antagonizing acetylcholine competitively at the neuroreceptor site and often are used clinically for reasons other than anticholinergic action. The main peripheral targets are the myocardium, exocrine glands and smooth muscle.[1] These peripheral, or atropine-like, effects are summarized in Table 2 and are generally well recognized by most physicians. However, the central signs are less well known, as usually the patient presents psychiatric manifestations with an acute brain syndrome. These central signs are listed in Table 3.

Recently it has been shown that physostigmine salicylate** will rapidly reverse the central and peripheral effects of anticholinergic toxicity.[2,3] Yet, the medical literature continues to lag in the recognition of this fact,[4,5] and a recent telephone survey by this laboratory revealed that only six of 20 community hospitals in the Boston area stocked this drug in their pharmacies. The same survey found that all medical school teaching hospitals of eastern Massachusetts routinely used physostigmine on their emergency services. These findings suggest a relative delay in the dissemination of this knowledge to community physicians. The following cases illustrate the use of physostigmine in anticholinergic toxicity and point out some common deleterious drug interactions seen in management.

†*Supported in part by The Commonwealth of Kentucky, Department of Human Resources, Bureau of Health Services, Frankfort*

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***Antilirium(R) (physostigmine salicylate) O'Neil, Jones, and Felman, Inc. 1304 Ashby Road, St. Louis, Mo. 63132.*

Case Reports

Case 1: T.W. is a 32-year-old, white, male foundry worker in a small Massachusetts community. He ingested 25-30 doxepin (Sinequan) capsules, 25 mg. These had been prescribed for depression by his family physician six months previously but hoarded by the patient. Approximately four hours after ingestion he was seen in the Acute Psychiatry Service of the Massachusetts General Hospital. He showed dysarthria, ataxia, recent memory impairment, incoherent speech, and agitation. General physical exam revealed 4 mm pupils sluggishly reactive to light, dry mucous membranes, foul breath, pulse 90, blood pressure 142/88 mm Hg and oral temperature 99.2°F. Neurological exam showed no localized findings.

He was given physostigmine salicylate 2 mg by intramuscular injection. Thirty-five minutes later his dysarthria had cleared, agitation was absent and recent memory was intact. Pulse dropped to 84, blood pressure was 138/85 mm Hg and temperature 98.4°F orally. He was urged to let us admit him to the overnight ward for further observation but refused and demanded that we return him to his local physician. These arrangements were made by phone and the physician was educated in further management. At the time of discharge there were no signs of anticholinergic toxicity. Follow-up revealed that no more doses had been needed.

Case 2: J.V. presented with somewhat complicated findings. He is a 23-year-old, unem-

TABLE 1
DRUGS AND CHEMICALS THAT MAY PRODUCE THE CENTRAL ANTICHOLINERGIC SYNDROME

A. Antidepressants
amitriptyline (Elavil), imipramine (Tofranil), doxepin (Sinequan, Adapin)
B. Antihistamines
chlorpheniramine (Ornade, Teldrin), diphenhydramine (Benadryl)
C. Ophthalmologic Preparations
cyclopentolate (Cyclogel), tropicamide (Mydriacyl)
D. Antispasmodics
propantheline (Probanthine), clidinium bromide (Librax)
E. Antiparkinson Agents
trihexyphenidyl (Artane), benztropine (Cogentin), procyclidine (Kemadrin)
F. Proprietary Drugs
Sleep-Eze (scopolamine, methapyrilene), Sominex (scopolamine, methapyrilene), Asthma-Dor (belladonna alkaloids), Excedrine-P.M. (methapyrilene)
G. Belladonna Alkaloids
atropine, homatropine, hyoscine, hyoscyamus, scopolamine
H. Toxic Plants
Mushroom (Amanita muscaria), Bittersweet (Solanum dulcamara), Jimson Weed (Datura stramonium), Potato Leaves and Sprouts (Solanum tuberosum), Deadly Nightshade (Atropa belladonna)

Many other drugs, preparations, and plants are capable of producing clinical findings of anticholinergic toxicity

ployed, white male who was participating in a methadone maintenance program at Boston City Hospital. Following two days of confusion, disorientation and auditory hallucinations, he was brought to the emergency ward of the Massachusetts General Hospital. He had an empty bottle of amitriptyline (Elavil) which had contained twenty, 50 mg tablets.

Examination revealed an agitated young man writhing in bed. He had impaired recent memory and was disoriented to time and place. Pupils measured 3 mm and did not react to light. Blood pressure was 140/100 mm Hg and pulse was 120. Mucous membranes were dry and rectal temperature was 100.0°F. Fasting blood sugar was 79 mg%, WBC 14,-900/mm^3 with a normal differential count and hematocrit 46.8%. Electrolytes were within normal limits.

He was given haloperidol (Haldol) 10 mg IM with no clinical change over a two-hour period. He was re-evaluated and received physostigmine salicylate 1 mg IM. Fifteen minutes later his delirium cleared and his pulse dropped to 90. Due to the appearance of opiate withdrawal signs he was given methadone 35 mg orally. Two and one-half hours following his initial physostigmine, he again became delirious and was given physostigmine 1 mg IV with a rapid clearing of his mental state. One hour later he developed a facial dystonic reaction with torticollis. This was believed to be secondary to haloperidol. He was given diphenhydramine (Benadryl) 75 mg intramuscularly but became delirious 30 minutes later. His delirium again reversed with physostigmine 1 mg IV and he was then transferred to the Eric Lindemann Mental Health Center for further treatment. There he was managed with diazepam 10 mg every 3-4 hours and 10 mg as indicated for agitation. He was discharged three days later in his normal premorbid condition.

Discussion

Physostigmine, a reversible anticholinesterase, is a non-polar tertiary amine and, unlike neostigmine and pyridostigmine which are charged quarternary amines, easily crosses the blood-brain barrier. This accounts for its effectiveness in reversing the central effects of anticholinergic toxicity. Table 4 summarizes its use in the management of adult anticholinergic toxicity. Relative contraindications for its use include asthma, gangrene, cardiovascular disease, ulcerative colitis, mechanical obstruction of the gastrointestinal or urogenital tract, glaucoma, diabetes, peptic ulcer disease, hypothyroidism, myotonia congenita and myotonia atrophica.[1]

Toxicity of physostigmine presents as excessive cholinergic-parasympathetic stimulation. This includes hypersalivation, increased pulmonary secretions, miosis, sweating, dyspnea, bronchial constriction, vomiting, abdominal cramps, diarrhea, urinary frequency and bradycardia.[6] Atropine should be available to reverse toxicity and is used in a dose one-half that of the administered physostigmine. The half-life of physostigmine is only 1½ to 2 hours,[1] so additional doses may be needed, due to the greater half-life of drugs which cause anticholinergic toxicity (Table 1). A positive response to physostigmine should be held diag-

TABLE 2
PERIPHERAL SIGNS OF ANTICHOLINERGIC TOXICITY
(Atropine Like)

Tachycardia	Urinary Retention
Mydriasis	Dry Mucous Membranes
Facial Flushing	Decreased Sweating
Hyperpyrexia	Decreased or Absent Bowel Sounds
Cardiac Abnormalities	

TABLE 3
CENTRAL SIGNS OF ANTICHOLINERGIC TOXICITY

Delirium	Hallucinations (usually visual)
Anxiety	Illusions
Hyperactivity	Disorientation
Seizures	Recent Memory Impairment

nostic.[7] The patient conditions most likely to cause management difficulty are obstructive respiratory embarrassment or cardiac arrhythmias due to organic heart disease.

The above cases demonstrate tricyclic antidepressant toxicity. The anticholinergic properties of these drugs have not been generally appreciated by most physicians and toxic brain syndromes are probably, more often than not, overlooked[4] in the depressed patient taking antidepressant drugs. Physicians should be prepared for central toxicity when using any drug that has marked anticholinergic properties (Table 1). This is especially true with drug-abusing patients or those who might be inclined to overdose themselves. He especially should not forget that more than *600* pharmaceutical preparations and combinations contain some form of belladonna alkaloids or synthetic anticholinergics.[8] Many over-the-counter preparations are implicated in causing anticholinergic syndromes, especially the forms for sleep.[9] Likewise, cycloplegics cause psychosis with delirium in both children and adults.[10] Any drug with anticholinergic properties used in existing organic brain disease or old age may predispose patients to central toxicity.[4,10] In questionable cases of mydriasis one can easily distinguish the drug-induced mydriatic pupil from the centrally-dilated one and save the patient an extensive neurologic evaluation. Pilocarpine 1% will constrict a neurologically-dilated pupil, but it will have no effect on a mydriatic pupil due to anticholinergic drugs. The exceptions to this rule are pathologic mydriasis associated with glaucoma or ocular trauma.[11]

Case 1 is rather straightforward. Case 2 demonstrates how a drug with miotic properties (methadone) initially confused the clinical picture. Also, the tricyclic antidepressants in general don't cause the marked pupillary mydriasis as seen with the belladonna alkaloids and synthetic anticholinergics. Similarly, Case 2 points out the contraindications to using phenothiazines or butyrophenones due to their own anticholinergic properties.[6] Diphenhydramine exacerbated the delirium as it is also anticholinergic.[1] Diazepam 40-50 mg immediately (half this dose if given IM) and 10 mg every four hours is a much more rational adjunct in the management of agitation as it will not potentiate anticholinergic toxicity.[12] If, due to anticholinergic toxicity, seizures occur, these will be controlled by physostigmine.

TABLE 4
MANAGEMENT OF ANTICHOLINERGIC TOXICITY IN THE ADULT

1. Do careful physical and mental status evaluation.
2. Give 2 mg test dose of physostigmine slowly IV (rapid injection may produce seizures) or IM.
3. Record vital signs, pupil size, bowel sounds, and mental status frequently.
4. If no change in fifteen minutes, give 1 mg additional physostigmine.
5. May need additional doses at thirty minute to two hour intervals.
6. Use atropine at one-half physostigmine dose for physostigmine toxicity.

For the pediatrician, cases of anticholinergic toxicity result primarily from children eating toxic plants, ingesting tricyclic antidepressants, experimenting with proprietary medications, and reactions to ophthalmologic drugs. Convulsions and cardiac conduction defects secondary to tricylic antidepressant toxicity appear to be far more common in children than adults,[13] and they would be by nature more dangerous than the other classes (Table 1). Both complications are rapidly controlled by physostigmine and may be life saving, as tricyclic antidepressants are poorly dialyzable.[14] The pediatric use of this drug is outlined in Table 5.

TABLE 5
DOSAGE OF PHYSOSTIGMINE IN THE CHILD[3]

1. Therapeutic Trial
   Physostigmine 0.5 mg slowly IV. If toxic effects persist and no cholinergic effects are produced, the drug should be readministered at five-minute intervals until a maximum dose of 2 mg is attained.
2. Therapeutic Dose
   The lowest effective trial dose should be repeated if life-threatening signs occur.

Summary

Physostigmine appears to be a unique and specific antidote for central anticholinergic toxicity. More than one dose may be necessary due to its short half-life. All patients should be appraised clinically rather than on quantity of drug ingested. Frequent recording of vital signs, temperature, pupillary diameter, bowel sounds, urinary output, and mental status should be made. Temperature, pulse, bowel activity, and mental status show the most rapid clearing; pupils may stay dilated for hours to days.[15] Atropine may be required in the event of

physostigmine toxicity. The use of phenothiazines for agitation should be avoided; diazepam is a more rational choice. More physicians should become familiar with the use of physostigmine.

Acknowledgements

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GRAND ROUNDS

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This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Aortocoronary Bypass Grafting for Preinfarction Angina†

SINCE 1967 aortocoronary bypass grafts have been utilized widely for the surgical treatment of patients suffering from arteriosclerotic coronary artery disease. The predominant surgical indication for this procedure has been angina pectoris. The operative mortality has been low (1%) and most patients (85%) experience complete relief of symptoms. Aortocoronary saphenous vein bypass grafting has also been employed with varying degrees of success in patients with preinfarction angina, acute myocardial infarction, postinfarction angina, congestive heart failure, refractory ventricular arrhythmias, and in patients in cardiogenic shock. This presentation will deal primarily with myocardial revascularization for patients with preinfarction angina.

Over the past 20 years a degree of myocardial ischemia intermediate between chronic angina pectoris and myocardial infarction has been well recognized. Various terms have been used to describe this syndrome including preinfarction angina, acute coronary insufficiency, coronary failure, intermediate coronary artery syndrome, unstable angina, impending myocardial infarction and status anginosus. From 22% to 50% of patients with preinfarction angina develop myocardial infarcts, and as many as 30% die within a few weeks of complications of coronary occlusion.[7] Most definitions of the syndrome include three characteristics:

1. Patients have severe angina at rest with no precipitating factors. The pain lasts longer than 15 minutes, is refractory to nitroglycerin and usually requires narcotics for relief.

2. Electrocardiographic ST-T changes of myocardial ischemia are usually present without Q wave patterns of infarction. These changes are usually transient and reversible, and occur during pain.

3. Serum enzymes including CPK, SGOT and LDH are not elevated to levels diagnostic of infarction.

Many patients who develop myocardial infarction have a history of such chest pain preceding their infarction. The incidence of recent angina preceding infarction was 45% in Wood's study and 39% in the patients reported by Vakil.[9,10]

Two patients recently treated at the University of Kentucky Medical Center will be presented to further illustrate the diagnosis and treatment of this syndrome.

Patient 1, #17-84-50. This 62-year-old man had good health until two years before admission when he was noted to be hypertensive and was treated with phenobarbital. Over the preceding 10 years, the patient had one episode per year of precordial exertional pain radiating into the neck and arm. Two months before admission he began having frequent and severe exertional chest pain. Two days before admission he had chest pain at rest.

Admission physical examination showed an obese male in no distress. Blood pressure was 140/80 mm Hg, pulse 55/min. Heart tones were distant but no murmurs or gallop were audible. Auscultation of the lungs revealed bibasilar rales. There was no peripheral edema and no elevated jugular venous pulsation. Electrocardiogram showed slight S-T segment depression in the left precordial leads compatible with ischemia. The patient was admitted to the coronary care unit and given propranolol 20 mg every 6 hours and nitroglycerin sublingually as needed for pain. The day after admission the patient had more severe chest pain at rest which was not relieved by nitroglycerin.

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Narcotics alleviated the pain very slowly after 30 minutes to one hour. The pain recurred frequently despite intensive therapy. Electrocardiogram revealed increased depression of the S-T segments in leads V_2 to V_6. The ECG changes resolved with relief of the chest pain but recurred with each episode. Serum CPK was 100u (Normal 70u) which returned to normal in two days. There was no elevation of LDH or SGOT. A diagnosis of preinfarction angina was made and cardiac catheterization was performed.

Catheterization revealed a normal ejection fraction (0.69), normal wedge pressure and normal left ventricular end diastolic pressure (8 mm Hg). The left ventriculogram showed no abnormalities of contraction or mitral insufficiency. Coronary angiography revealed 90% obstruction of the right coronary artery with normal distal vessels. The left main coronary artery was normal, but there was 80% stenosis of the left anterior descending and circumflex coronary arteries. Shortly after cardiac catheterization, the patient again had substernal chest pain and electrocardiogram showed more S-T segment depression in leads I, and AVR and S-T segment elevation in II, III, and AVF. Chest pain lasted one hour despite nitroglycerin and narcotics.

The following morning a triple aortocoronary artery bypass was performed. Reversed saphenous vein grafts were anastomosed to the posterior descending branch of the right coronary artery, the left anterior descending coronary artery and the obtuse marginal branch of the circumflex coronary artery. Flow measurements were 70 cc/min in the left anterior descending graft, 75 cc/min into the circumflex graft and 100 cc/min into the right coronary graft. The operation was performed with one hour 35 minutes on cardiopulmonary bypass.

Post-operatively the patient made an uneventful recovery and was subsequently discharged. His electrocardiogram revealed no ischemia or infarction. Six weeks after operation the patient was active and had no recurrence of his chest pain.

Patient 2, #04-03-11. This was the third admission for this 60-year-old man who complained of severe chest pain. The patient had been previously admitted in 1970 for evaluation of atrial fibrillation. No etiology was determined. Atrial fibrillation continued but he was asymptomatic until six weeks before this admission, when he was admitted for severe chest pain and ECG evidence of an inferior wall myocardial infarction. Following the infarction the patient had three episodes of severe chest pain with transient S-T segment elevation. He was treated with propranolol 20 mg every 6 hours and nitroglycerin as needed. His condition became stable and he was discharged. He experienced no further chest pain until the day of admission when he developed sudden anterior substernal chest pain identical to the pain he had had with myocardial infarction.

On admission he was alert and in no distress. Blood pressure was 110/70 mm Hg, pulse 80/min, respirations 10/min. There was no evidence of elevated jugular venous pressure and his chest was clear to auscultation and percussion. Cardiac examination revealed no murmur, gallop or rub. Abdominal examination revealed no hepatosplenomegaly, masses or tenderness. Past medical history was significant in that the patient had bilateral greater saphenous vein stripping in 1961. He was admitted to the coronary care unit.

Eighteen hours after admission he experienced substernal chest pain and simultaneously developed ventricular tachycardia. A precordial thump terminated this episode. Lidocaine 100 mg was given IV but the ventricular tachycardia recurred and progressed to ventricular fibrillation. The patient was then defibrillated twice with resumption of atrial fibrillation and normal blood pressure. ECG revealed 3 mm S-T segment depression in lead V_2. Two hours later ECG showed complete reversal of these changes. Serum CPK was 110 units that evening but there was no rise in serum SGOT or LDH. Coronary angiography showed 95% stenosis of the right coronary artery and 85% obstruction of the left anterior descending coronary artery. There was no stenosis of the left main coronary artery or the circumflex coronary artery. The pulmonary capillary wedge pressure and left ventricular end diastolic pressures were normal (9 mm Hg). The ejection fraction was diminished (0.49).

The following day the patient underwent a double coronary artery bypass graft utilizing the left internal mammary artery to the left anterior descending coronary artery and the left radial artery from the aorta to bifurcation of the right coronary artery. Cardiopulmonary bypass time was two hours eight minutes. Flow was 85 cc/min through the right coronary graft and 30 cc/min in the internal mammary artery graft to the left anterior descending artery.

The patient made an uneventful recovery without evidence of myocardial ischemia or infarction. He had complete relief of angina and was subsequently discharged. The patient was asymptomatic at his six week follow-up examination, and had no chest pain despite increased activity.

Discussion

Treatment of preinfarction angina with coronary bypass grafting has become an accepted alternative to medical therapy in recent years. Lambert, et al. reported the first large series of patients treated surgically for preinfarction angina. Three of their 57 patients died (5.3%).[6] Only three of their patients had poor ventricular function, however. Scanlon, et al. treated 70 patients with preinfarction angina.[8] The mortality in 48 treated surgically was 12.5% and was 27% in the 22 patients treated medically. They found mortality to be related to severity of coronary disease and impaired ventricular dysfunction. Miller and his associates performed coronary artery bypass grafting on 67 patients with preinfarction angina with 10.4% mortality.[7] They found mortality to be related to preoperative congestive failure, hypotension, and atherosclerotic risk factors as well as duration of cardiopulmonary bypass. The low incidence of infarction (10%) in their experience led them to conclude that infarction could be prevented with bypass grafting in unstable angina.

The enthusiasm for operative treatment of preinfarction angina has been related to low mortality. The mortality reported by various groups has been 2.5%, 5%, 7%, and 11.1%.[1,3-5] Conti and associates are less enthusiastic about surgical treatment, apparently because of higher operative mortality (22%).[2] All the above authors have found greater pain relief in patients treated with bypass grafting. There is no difference of opinion regarding the symptomatic benefits of bypass grafting for preinfarction angina.

For bypass grafting to be justifiable, it must have a low operative mortality (less than 10%), low incidence of perioperative and late infarction, and infrequent late death. Bonchek, et al. have shown the natural history of operated patients to satisfy all these criteria.[1] In 55 patients they found 5% operative mortality, 11% perioperative infarction, 5% late infarction and 2% late death. Actuarial analysis of survival data shows a 93% three-year survival which is superior to medical treatment of all categories of coronary disease. Bonchek's experience justifies bypass grafting for unstable angina, but very few of his patients had evidence of ventricular dysfunction preoperatively.

Both Scanlon and Miller found operative mortality to be related to poor preoperative ventricular function. Thus bypass grafting for unstable angina and poor ventricular function must be proven safe to be justified. At the University of Kentucky Medical Center, the mortality of bypass grafting for unstable angina has not been related to poor ventricular function. We have operated on 23 patients with two deaths (8.7%). Mortality with good ventricular function was 2/12 and with poor ventricular function 0/11. One death was due to respiratory failure and one due to cardiac failure in a patient with lupus erythematosus and chronic immunosuppression.

One of the 23 patients (4.3%) had a perioperative infarction as evidenced by new Q waves. Twenty-one (91.3%) were relieved of angina pectoris post-operatively. This low operative mortality justifies bypass grafting even with poor ventricular function for symptomatic relief. The rate of late infarction and death in the group with poor ventricular function will be important factors in justifying bypass grafting to alter the natural history of the disease.

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Joe R. Utley, M.D.

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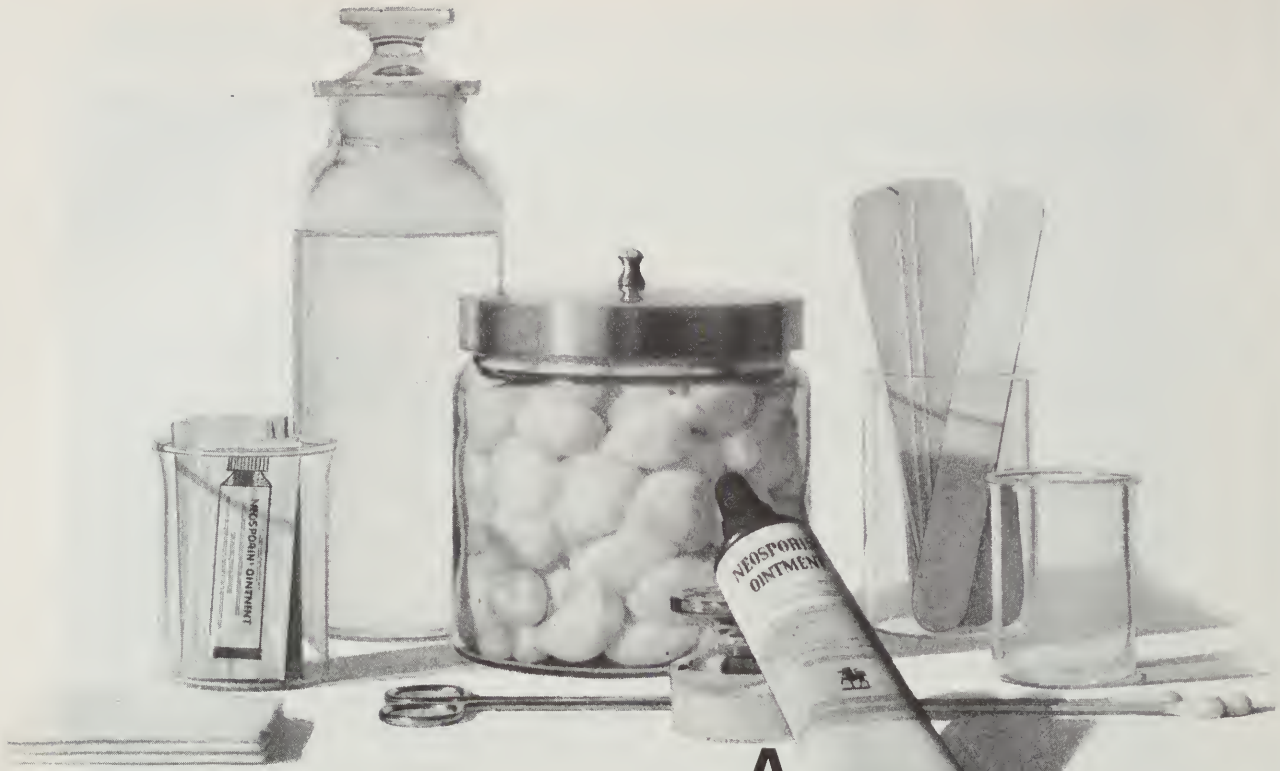
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Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

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Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. **Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F CO.
Carolina, P.R. 00630
Subsidiary of
SmithKline Corporation

KEEP THE HYPERTENSIVE PATIENT ON THERAPY KEEP THERAPY SIMPLE WITH DYAZIDE®

Trademark

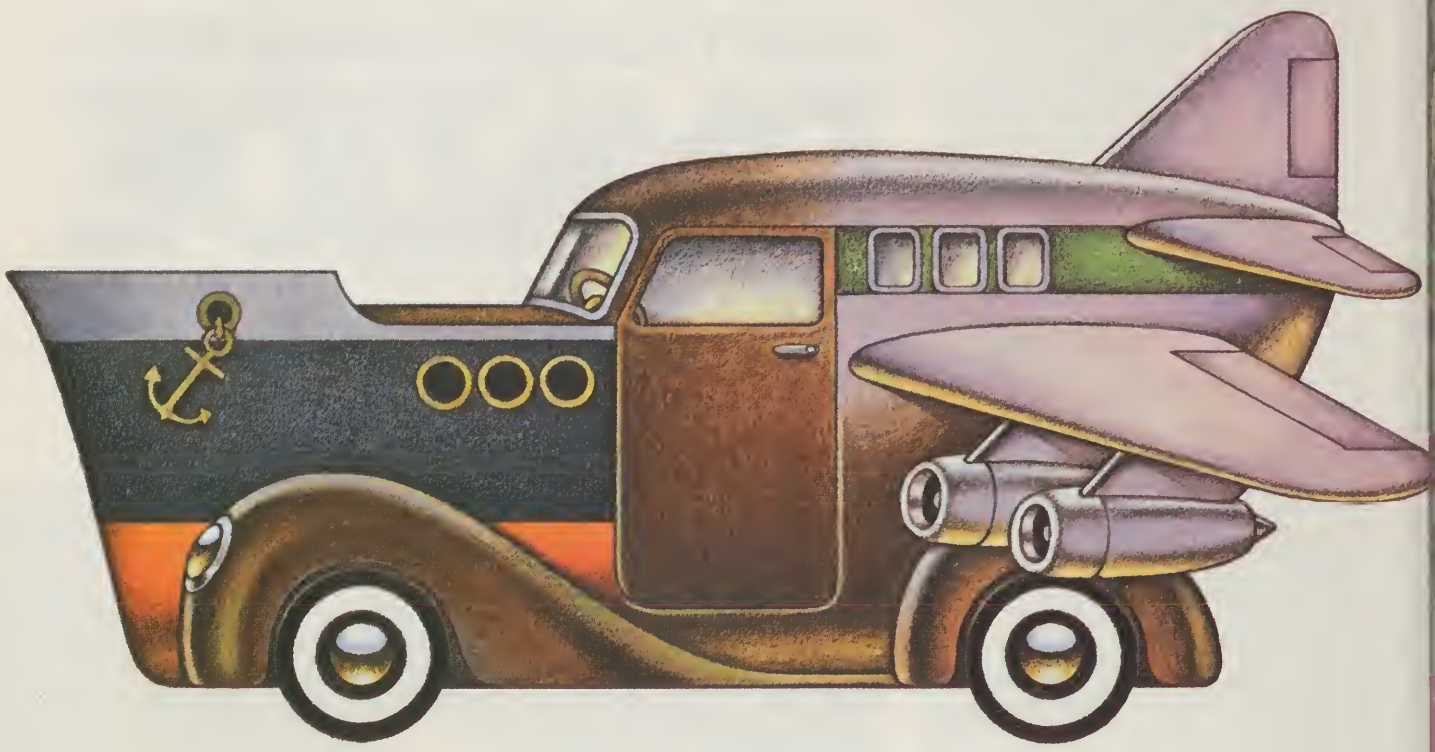
Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

Neither inconvenient potassium supplements nor special K^+ rich diets needed as a rule. Just 'Dyazide' once or twice daily for maintenance.



Two prime reasons patients drop out of hypertensive therapy are (1) the patient failed to understand directions, and (2) the regimen was overly complicated. Dosage is simple with 'Dyazide', easily understood, once or twice daily, depending on response. There's no need to complicate the regimen with potassium supplements or unwieldy potassium-rich diets.

TO KEEP BLOOD PRESSURE DOWN AND KEEP POTASSIUM LEVELS UP



On land, sea, and in the air...

Up to 24 hours of effective control with a single dose...in nausea, vomiting and dizziness associated with motion sickness.

Dosage: 25 to 50 mg. 1 hour before travel.
Available on prescription only.

BRIEF SUMMARY OF PRESCRIBING INFORMATION
CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25 Chewable Tablets
(meclizine HCl) 25 mg.

for motion sickness



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

CASE 12-71. This 16-year-old, married, white gravida 1, para 0, LMP was first seen on October 15, 1970, with the EDD of July 22, 1971. She was 5′8″ with her usual weight 155 lbs, negative serology, HCT 38, rubella titer 1:160, blood type B Rh+, Pap smear negative, chest X-ray normal, on May 26, 1971. Her prenatal visits were:

DATE	May 27	June 7	June 15	June 17	June 22
WEEK GESTATION		34	35		
WEIGHT	186 3/4	187 3/4	192 1/4	192 1/4	196 1/4
BLOOD PRESSURE	114/60	118/70	120/76	120/78	120/76
EDEMA			slight		
URINE	O.K.	O.K.	O.K.	O.K.	O.K.

She was brought to the hospital DOA at 6:55 p.m, June 23, 1971, with lividity changes of the chest and legs. Blood was present in the mouth.

An autopsy revealed blood in the oral pharynx consistent with a cheek bite during a convulsive seizure. There was no urine in the urinary bladder, which was consistent with evacuation of urine during a convulsive seizure. The autopsy revealed cerebral edema and a porencephalic cyst in the left cerebral hemisphere. These findings were highly suggestive of a seizure. Postmortem autolysis destroyed any possible evidence of kidney damage. It was felt the cause of death resulted from a severe convulsive seizure evidenced by evacuation of the bladder and biting of the cheek with bleeding. The cerebral edema was consistent with edema of toxemia or eclampsia, possibly triggered by the porencephalic cyst.

Comment

While this case exhibits no distinctly diagnostic features, certainly the combination of a young, healthy, nulliparous and gravid patient with these autopsy findings points strongly to eclampsia. This peculiar disease is well known for its fulminant and often unheralded onset, and in this case the usual prodrome of preeclampsia does not exist. The rapid weight gain and diastolic pressure elevation of greater than 15 mm Hg are suggestive of preeclampsia. The autopsy findings are consistent with but not diagnostic of eclampsia. The porencephalic cyst may have been acute, but was probably chronic and not related.

Preeclampsia and eclampsia are responsible for one-fifth of all maternal deaths and are certainly suspect in this case.

In the December, 1973, and December, 1974, issues of this *Journal,* lengthy descriptions of eclamptic patients appeared. The need for early hospitalization and early, aggressive therapy terminating in delivery, as outlined in these discussions, cannot be overly stressed in the management of this disease.

Reference

December, 1973 issue of the *Journal of the Kentucky Medical Association,* Vol. 71, pgs. 384-85, and December, 1974 issue of the *Journal of the Kentucky Medical Association,* Vol. 72, pgs. 672-73.

EDITORIAL

The Power of Our Pens

ASK any man on the street what features of his medical care are most worrisome to him, and chances are he'll mention (1) cost and (2) availability. Press him further for details, and you may find he himself has no major concerns about either of the problems mentioned. He has his major medical insurance paid for by his company or he's covered by Medicare/Medicaid, and as for availability, either he has a family doctor or he goes to the hospital emergency room when he needs care. He knows "cost" and "availability" are big issues, though, from his sources on TV, and through them, from Congress.

The cost of medical care is a pressure-packed issue, indeed, in Congress now. The pressure arises not so much from the individual patient, whose basic medical needs are usually met, as it does from those who pay the bills—industry and government. Why is this pressure reaching a political level suggesting National Health Insurance, and concomitant rate-setting regulations? Because we are part of an industry whose national costs will reach $108 billion (est.) in 1975. This represents more than 8% of our gross national product, as contrasted to 5% 20 years ago. And these costs are rising, due to many factors, at a rate outstripping even our recent economic inflation.

Are we as physicians taking home all this money as our own income? Of course not! Physicians' gross incomes amount to only about 19% of such expenditures (and gross, we need to remind ourselves as well as others, is itself a long way from net). Hospital costs account for 46% of the total expenditure—not surprisingly, by far the largest item; outpatient services, prescription drugs, dental care, nursing homes, eyeglasses and appliances, etc., account for the remainder.

Can we, therefore, point accusing fingers at the hospitals as the causes of medicine's financial pressures? Can we make our rounds and return to our offices, leaving the hospital administrators to wrestle alone with their inflated payrolls? Or are we, at least in part, *responsible* for our patients' hospital bills? Indeed we are. As physicians we are entrusted with control of our patients' care, and this translates into partial control of their hospital costs via the order sheet. While too-vigorous efforts to cut costs will decrease the quality of care, needless hospitalization and excessive testing will, also—all the while hastening and hardening the political controls being considered. ("Defensive medicine", as a protection against malpractice suits, is often spoken of as justification for the use of multiple laboratory and x-ray tests. Lack of patient rapport, rather than lack of tests, however, seems to be at the root of the majority of such claims.)

We need our hospitals and they need us. In this issue of *The Journal* we present some thoughts from Wade Mountz, Chairman of the Board of the American Hospital Association, and Hasty Riddle, Executive Vice President of the Kentucky Hospital Association, concerning the interrelationship of physicians and hospitals. We also introduced in the February issue the first of a series of "Average Charges", designed to make us more aware of the economic impact of our hospital orders.

In 1972 the KMA House of Delegates passed a resolution requesting hospitals to send copies of a patient's bill to each doctor on the staff at regular intervals. It is time that this, also, be implemented now.

We as physicians have more economic power than we have realized; we must use it wisely, for our patients' sake—and for our own.

WHj

SPECIAL ARTICLES

The Doctor's Influence in Hospital Costs

WADE MOUNTZ*

THAT a hospital administrator is asked to write in a medical journal about how physicians can control patient costs in a hospital is significant evidence of how the relationships in a hospital structure and in the health care field have changed. At one time, it would have been unthinkable, at the least, presumptuous, for an administrator to tell physicians how they control costs; similarly, it would have been equally unheard of for a physician to sit on a hospital board of trustees to make policy decisions for that hospital.

But these are changing times, in more ways than one. Complaints about rising health costs and demands for public accountability are converging all at once. We in the health care industry have never been so scrutinized, analyzed or pressured to justify our actions and explain our expenditures.

Consumer groups, journalists (muckracking and other) and government agencies or bureaucrats are clamoring for strict documentation, accountability and justification of what we spend. And the questions they all want answered are, why are costs so high, and what are we doing to control the patient's bill? Although the purpose of this article is to suggest what the physician can do to control costs, allow me an editorial comment. I have always regarded all elements of the hospital organization as a community of persons who have come together, in a technical sense, in the best interests of the patient. As such, it is a mistake to view the decision-making process in a hospital as being simplistic; it is intricate and complex. No longer a "physician's workshop," today's hospital has become a complex organizational structure, a "community of interwoven skills and services."

Chairman of the Board, American Hospital Association, and President, Norton-Children's Hospitals, Louisville

Nonetheless, there are several areas of concern that remain the sole responsibility of the physician. There are several decisions made daily by the physician, not the hospital, that in the long run determine the extent of a patient's bill. It is, after all, the physician who admits the patient, orders all the services and utilizes the space and equipment. Each order the physician makes is a conscious act on his or her part; and in most cases he or she is spending money whenever it is done. In addition, most equipment, facilities and therapies are purchased or initiated at the request of the medical staff. Most of us believe this is quite appropriate. The Federal government in fact has now mandated physicians' participation in the budgeting process through Sec. 234 of Public Law 92-603.

According to Russell Roth, M.D., a recent president of the American Medical Association, physicians are a part of the solution, not the cause, of the problem of high hospital costs. "Though we don't have a handle on the hospital's costs—its payroll, the prices it pays for food, supplies and utilities—we do have a handle on how much of this kind of service a patient uses and how long he stays in bed."

All too often, however, physicians are unaware of hospital costs because the hospital administrator has not briefed them on such matters. Responsibility in this case is a two-way affair; it is up to the hospital to make certain the medical staff leadership is aware of the financial facts—an area in which we have often been remiss—and it is the responsibility of the medical staff to consider this information when scheduling patients and ordering services.

We have also found a distinct correlation between a hospital's ability to collect bills and the timeliness and accuracy with which forms or records are filled out by physicians. With

Kentucky's average hospital admission billing to Blue Cross of $585.89, every seven of your incomplete hospital charts which cannot be billed are equivalent to adding each day approximately $1.00 of unneeded hospital cost. Similarly, concise discharge summaries, which are promptly written or dictated by physicians, also help to reduce clerical costs.

In conclusion, we recognize that hospitals exist to serve patients; and that in order to do this, we must serve the patients' doctors. On the other hand, we recognize that if a hospital goes bankrupt, or is so heavily regulated it cannot function, a major portion of the voluntary system goes down the drain. It is time for physicians to be given and to accept their full measure of responsibility in the management decisions of a hospital, and one of the most important ways that responsibility can be exercised is for physicians to become more conscious of the cost side of management.

—Hospital Costs—

Average cost to a patient in Kentucky (BC-BS data)
for a Complete Blood Count is:
$6.75
(Range: $5-$10)

The "Hospital Costs" feature, above, was erroneously introduced in our February Journal, without adequate explanation or background. In this issue the editorial and special articles are designed to place this feature in perspective. The Journal regrets the editing error that led us to start the series without the appropriate explanatory notes, last month.

Ed.

The Interrelationship of Physicians and Hospitals

Hasty W. Riddle*

THE impact of physicians' judgement and decisions on the cost of hospital care should be considered from at least two perspectives: how their decisions affect the individual patient's bill and how physicians could better lend their judgment and support to the hospital's overall decision-making process.

Historically, physicians have been viewed as the humanitarian practitioners of the healing arts with little need to concern themselves with the "business" aspects of medical practice. And hospital administrators have been primarily viewed as business managers whose main responsibilities were to balance the books and provide the people, equipment and supplies that enabled the doctor to practice.

However, modern medical practice with its plethora of specialization and the vast array of equipment and treatment procedures from which to choose, and the modern hospital administration which is facing unprecedented pressure from government, in the forms of regulations, funding cutbacks and others, and higher expectations for service from the public in general, have necessitated both of these elements of health care delivery reaching greater levels of communication and understanding.

It is no secret that physicians and hospital boards and administrators have not always been the most compatible bedfellows, on either an organizational or an individual basis. However, from a sincere belief that each has the best interest of the patient at heart, I would submit that these conflicts have been more from the abovementioned disparity in frames of reference, rather than from being at cross-purposes.

Collectively, we have made great strides in recent years at improving communication and understanding, as evidenced by the number of physicians now serving on hospital boards and even the invitation to submit this article to the *KMA Journal.*

The communication process must be a two-way street if it is to be effective. In 1972, the KMA House of Delegates passed a resolution requesting hospitals to send copies of a patient's bill to each doctor on the staff at regular intervals so that physicians could have some idea of the economic effect of their medical decisions. This resolution came about as a result of long hours of previous efforts between KMA and KHA. The KHA subsequently encouraged our hospitals to do so, and the majority of hospitals complied in some way, by either sending a copy of the bill, or placing a copy of the hospital's charge schedule in the physician's lounge. However, the hectic schedule of most physicians prohibited in-depth study of these documents for the most part and some even commented that they thought the hospital was trying to inhibit their practice of medicine.

There is no question but that it is the hospital administration's responsibility to make the medical staff leadership aware of the economic facts of hospital care, and the medical staff has concomitant responsibility to consider these facts when scheduling patients and ordering service, without sacrificing the quality of care. There are those who place a great deal of the blame for inattention to patient costs on third-party payors. While this may be true to a certain extent, those of us who have spent our lives in the health field pretty well know the real facts.

Perhaps, for example, this process of developing a meaningful communications medium might be assisted by the KMA and the KHA developing seminars on hospital costs specifically for chiefs of medical staffs, administrators and presidents of boards of trustees. These are the three organizational elements with the greatest opportunity to have a positive impact on hospital costs, and their understanding of each other's role is essential if progress is to be made.

At the organizational level, the KMA and the KHA have worked hard over the past years at developing sound working relationships. But this has not just happened. For example, since I first came to Kentucky in 1960 I have served on the Board of Blue Shield. Also, I have always been invited to meetings of the KMA Hospital committee, and staffwise KMA and KHA have always had a close working relationship. These opportuni-

*Executive Vice President, Kentucky Hospital Association, Louisville

ties have given me and others in the field of hospital administration a rare privilege to develop and maintain rapport with the leadership of the medical community in Kentucky and to work on mutual concerns before they reach the level of formal problems.

Our staff deals directly on a day-by-day basis with hospital administrators throughout the state and knows many of the problems they face. These individuals have in many cases been considered expendable to the whims of political fortune, or a focal point for dissatisfactions which individuals have with the hospital; however, hospital administrators are for the most part highly trained professionals who work long, dedicated hours toward better patient services.

Many politicians with ready access to the public forum have led the general public to believe that we have a health care crisis in this country. Anyone with a deeper than surface understanding of the health care system knows that this is not the case. We have weaknesses and we have problems, but not of the crisis proportions that some would have the public believe.

One of our greatest weaknesses has been our failure to seek and cultivate public understanding. Generally speaking, hospitals have probably done the poorest job at public relations of any type of service organization. And while that has begun to change in recent years, we still have a long way to go.

In addition, it would appear that we may be at a point in time where peoples' faith in institutions in general is at an all time low. By far the majority of complaints we receive at the KHA from patients do not concern professional treatment, but rather deal with the *system* the patient encounters in seeking health care and service, and the patient's inability to understand that system or find someone responsible who can either explain or change it.

The apparent loss of faith in institutions and systems has put a heavier load of accountability on responsible individuals both directly and indirectly involved to become more vocal advocates for the institution, if they truly believe in its viability.

Most physicians in Kentucky are strong advocates for their hospitals. They have the trust and credibility of their patients and their connections with the hospital are such that the physician is considered to have the knowledge of the "system".

It is the responsibility of the administrator, governing board and organized medical staff to be sure that they all know specifically what is required to make the hospital run, as well as provide internal and external support for the institution.

While this would not have a direct impact on reducing or containing hospital costs, it could have the indirect effect of possibly quieting the voices of those who would have us believe that the hospital system in this country is beyond repair.

Finally, it is a source of pride to KHA that our cordial relationship with KMA is one of the few such in the country. This has not just happened; it is the result of a lot of work, statesmanship and a sincere desire to see that the patient gets the best of care.

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

The memory of Paul Dudley White continues to recur and I thought of him again while reading James A. Michener's *Centennial* wherein there is a story of a prehistoric chase involving a horse and a pack of wolves. Michener writes of the horse anthropomorphically as it races to escape the wolves: "Then, with terrible suddenness, his breath came short and a great pain clutched at his chest." I presume this means equine angina although no mention was made of pain radiation to the left foreleg.

Doctor White wrote interestingly of angina pectoris and especially so in his article "The Background of Angina Pectoris" that appeared in September 1974 *(Modern Concepts of Cardiovascular Disease* 43:109). His interests were not always of cardiology for he was a great promoter of international friendship—especially among physicians—and world peace. He actually coined the word "irenology", the science of peace.

I have forgotten where I saw it, but it impressed me enough to write it down: "The sufferer who frustrates a keen therapist by failing to improve is always in danger of meeting primitive behavior disguised as treatment."

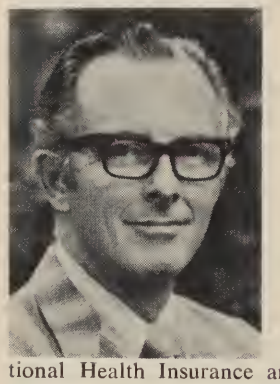
Physicians are frequently criticized for their lack of interest in and failure to support community efforts. In the Louisville Area Chamber of Commerce brochure *(Action* 8:3 January 1975) there is a list of new members; a total of twenty and six are practicing physicians!

News of organ transplants creates great interest with equal misunderstanding, and recent publicity concerning pancreatic transplantation as a cure for diabetes mellitus has produced great hope in diabetic patients. They are hopeful for an end to tiresome daily insulin injections, the drudgery of urine testing, frustrating diet watching, and the discomforts associated with blood glucose determinations. Such a cure is not so sure nor so close at hand, and from the National Institute of Health and the American Diabetes Association come warnings. The transplantation of total or subtotal pancreas is regarded as a highly experimental procedure and successful transplants have been exceedingly limited. Transplantation is not yet an accepted treatment form but the ultimate cure, although not yet attained, may not be too far in the future.

ORGANIZATION SECTION

"Medical Critical Dimension" In Owensboro March 25

Continuing the program of bringing dialog on current medical issues to the physicians of Kentucky, "Medical Critical Dimension, 1975", a special KMA seminar, reaches Daviess County on March 25.



To be held at Gabe's Restaurant in Owensboro, the seminar's keynote speaker is Tom E. Nesbit, M.D., left, Nashville, Tennessee, Speaker of the AMA House of Delegates. His topic, "National Health Insurance and Its Ramifications", begins the evening's discussions, to include: "The Role of Voluntary Pre-Payment Systems", Ned Parrish, President of the National Association of Blue Shield Plans, Chicago; "Liability Insurance Problem in Kentucky", Harold B. McGuffey, Commissioner of Insurance of the Commonwealth of Kentucky; and "Kentucky's Mandatory Medical Education Plan, 1975", R. Glenn Greene, M.D., Chairman of KMA's Continuing Medical Education Committee.



Boone, Campbell and Kenton counties host "Medical Critical Dimension, 1975" on April 3 at the Rowntowner Motor Inn, Ft. Mitchell. Richard E. Palmer, M.D., above, Alexandria, Virginia, Chairman of the AMA Board of Trustees, opens this seminar with views on National Health Insurance, followed by George R. Dunlop, M.D., Worcester, Massachusetts, Chairman, Board of Directors, National Association of Blue Shield Plans, who will cover Voluntary Pre-Payment Systems. Commissioner McGuffey and Doctor Greene again round out the program with their presentations.

A summary of "Medical Critical Dimension, 1975", by Hoyt D. Gardner, M.D., KMA President, and a question and answer session complete the evening. A social hour at 5:30 p.m. and dinner at 6:00 p.m. precede each meeting, to convene at 7:00 p.m.

The final seminar will be held in Ashland (Boyd County) May 29, at the Bellefonte Country Club. Further information on "Medical Critical Dimension, 1975" can be obtained from the above county medical societies or from KMA Headquarters.

"Medical Critical Dimension, 1975" Calendar

Mar. 25—Owensboro, Gabe's Restaurant

Apr. 3—Ft. Mitchell, Rowntowner Motor Inn

May 29—Ashland, Bellefonte Country Club

Alcoholism Treatment Seminar Looks At #1 Drug Problem

"The number of doctors prepared to treat alcoholism is grossly inadequate when one considers that alcohol is America's number one drug problem." Centering on their call for a freer flow of such information, the University of Louisville presents Frank A. Seixas, M.D., Medical Director of the National Council on Alcoholism, and Maxwell N. Weisman, M.D., Director of Alcoholism Control for the State of Maryland, in the seminar, "Medical Aspects of Alcoholism".

Open to all but featuring special workshops for physicians only, "Medical Aspects of Alcoholism" meets May 27 and 28 in the Canterbury Room, Executive Inn, Louisville. Doctors Seixas and Weisman, nationally active in alcoholism research and information dissemination, discuss "Getting the Alcoholic to Treatment", "Children of Alcoholics", "The Person Inside the Alcoholic", and other topics through a lecture, film, discussion group and workshop format.

The program is acceptable for 13 credit hours in Category I for the AMA Physician's Recognition Award, and for 13 prescribed hours by the American Academy of Family Physicians. The registration fee of $25.00 per day for physicians includes meals and materials, and early registration is requested. For more information, contact Joe Trabue or Jean Kalkhof, University of Louisville, 636-4463.



Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed: "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."*

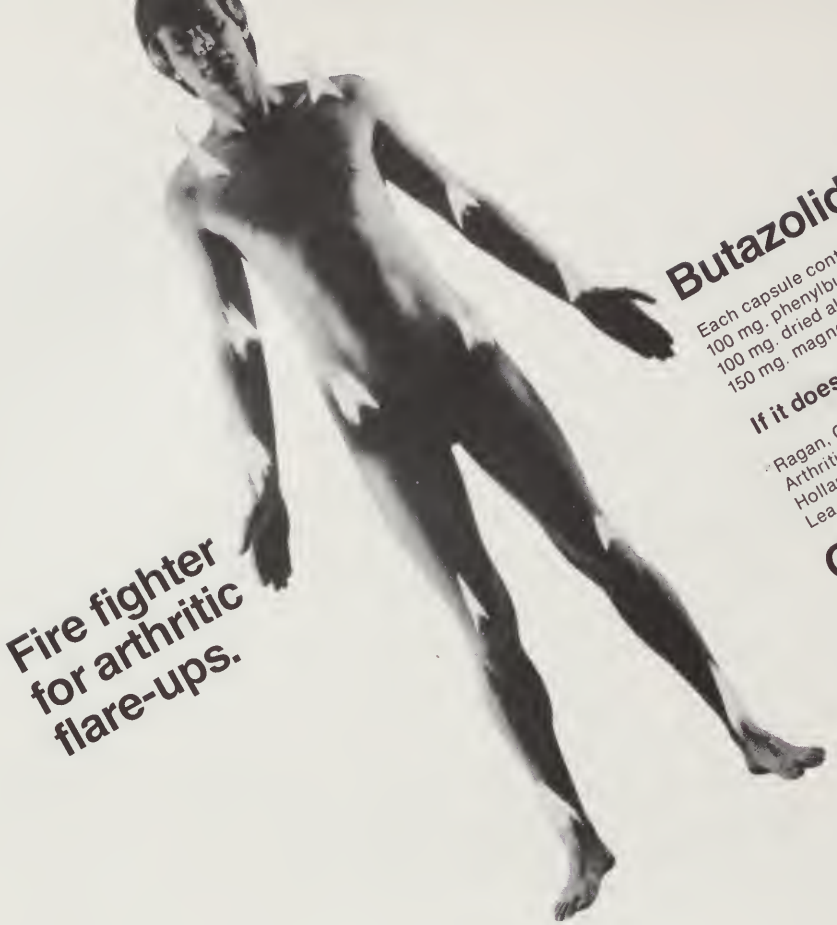
If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you can get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.



Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

Ragan, C.: The Clinical Picture of Rheumatoid Arthritis, in Arthritis, ed. 8, edited by J. L. Hollander and D. J. McCarty, Jr., Philadelphia, Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Fire fighter for arthritic flare-ups.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
(B)98-146-070-J (10/71)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

BU 10259

"Gentlemen, congratulations are in order."



"A.H. Robins asked me to compare the banana flavor of their Donnagel®-PG with the real thing and, by jove, I couldn't tell the difference. Not even in sip-by-sip comparison. Amazing!

"There's no unpleasant paregoric taste because there's no paregoric. Clever, wouldn't you say? Instead, A. H. Robins uses the therapeutic equivalent, powdered opium, to promote the production of formed stools and lessen the urge. And Donnagel-PG also provides the demulcent-detoxicant effects of kaolin and pectin, plus the antispasmodic benefits of belladonna alkaloids.

"But what I find most impressive is the skillful manner in which A. H. Robins has combined these ingredients with that delicate flavor of vintage bananas. Smashing, absolutely smashing!

"May I propose a toast?"

Donnagel®-PG. ℞

Donnagel with paregoric equivalent
Each 30 cc. contains:

Kaolin	6.0 g.
Pectin	142.8 mg.
Hyoscyamine sulfate	0.1037 mg.
Atropine sulfate	0.0194 mg.
Hyoscine hydrobromide	0.0065 mg.
Powdered opium, USP (equivalent to paregoric 6 ml.) (warning: may be habit forming)	24.0 mg.
Sodium benzoate (preservative)	60.0 mg.

Alcohol, 5%

℞ Available on oral prescription or without prescription in compliance with applicable state and local law.

A·H·ROBINS

A. H. Robins Company, Richmond, Virginia 23220


Robitussin
Robitussin A-C
Robitussin-DM
Robitussin-PE
Cough Calmers
Cough Suppressant Lozenges

A·H·ROBINS

IN COUGHS OF COLDS, "FLU," AND U.R.I.: CLEAR THE TRACT WITH THE ROBITUSSIN® LINE

Fall and winter coughs are back. Time to help clear the lower respiratory tract with the five Robitussins and Cough Calmers. All contain glyceryl guaiacolate, the efficient expectorant that works systemically to help increase the output of lower respiratory tract fluid. The enhanced flow of less viscid secretions soothes the tracheobronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise. Available on your prescription or recommendation.

For unproductive coughs

ROBITUSSIN®

Each 5 cc. contains:
Glyceryl guaiacolate ..... 100 mg.
Alcohol, 3.5%

For severe coughs

ROBITUSSIN A-C®

Each 5 cc. contains:
Glyceryl guaiacolate ..... 100 mg.
Codeine phosphate ..... 10.0 mg.
(warning: may be habit forming)
Alcohol, 3.5%

Non-narcotic for 6-8 hr. cough control

ROBITUSSIN-DM®

Each 5 cc. contains:
Glyceryl guaiacolate ..... 100 mg.
Dextromethorphan hydrobromide ..... 15 mg.
Alcohol, 1.4%

Robitussin-DM in solid form for "coughs on the go"

COUGH CALMERS®

Each Cough Calmer contains:
Glyceryl guaiacolate ..... 50 mg.
Dextromethorphan hydrobromide ..... 7.5 mg.

Clears nasal and sinus passages as it relieves coughs

ROBITUSSIN-PE®

Each 5 cc. contains:
Glyceryl guaiacolate ..... 100 mg.
Phenylephrine hydrochloride ..... 10 mg.
Alcohol, 1.4%

MEET THE NEWEST MEMBER OF THE LINE

Comprehensive decongestant action helps control cough and clear stuffy nose and sinuses. Non-narcotic.

ROBITUSSIN®-CF

Each 5 cc. contains:
Glyceryl guaiacolate ..... 50 mg.
Dextromethorphan hydrobromide ..... 10.0 mg.
Phenylpropanolamine hydrochloride ..... 12.5 mg.
Alcohol, 1.4%

Select the Robitussin® formulation that treats your patient's individual coughing needs:

	Expectorant-Demulcent	Cough Suppressant	Long-Acting (6-8 hours)	Nasal, Sinus Decongestant	Non-Narcotic
ROBITUSSIN®	●				●
ROBITUSSIN A-C®	●	●			
ROBITUSSIN-DM®	●	●	●		●
ROBITUSSIN-PE®	●			●	●
ROBITUSSIN®-CF	●	●		●	●
COUGH CALMERS®	■	■	■		■

A. H. Robins Company, Richmond, Va. 23220

Why is Gantanol® (sulfamethoxazole) basic therapy in nonobstructed urinary tract infections?

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, pur-

Because it is considered a good choice...

- for efficacy in nonobstructed cystitis, pyelonephritis and pyelitis
- for control of susceptible *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris*
- for prompt antibacterial blood and urine levels in from 2 to 3 hours after initial 2-gram adult dose
- for economical around-the-clock coverage
- for maximum patient cooperation with easy-to-remember B.I.D. dosage

Basic Therapy

Gantanol®

(sulfamethoxazole)

Tablets/Suspension (0.5 Gm) (0.5 Gm/teasp.)

pura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

AMA-ERF Donations to be Distributed in March

In March, AMA-ERF will make its annual distribution of funds to every medical school in America. At that time, all the money designated for a particular school and an equal share of all undesignated funds will be awarded to that school. Last year the University of Louisville received $8,999.68 and the University of Kentucky was awarded $5,002.79. These awards are made in the form of unrestricted grants and the dean of each medical school may use these flexible funds in any way—to apply toward scholarships or loans, to expand programs, to build new facilities or to solve any very pressing financial need of his school. The University of Kentucky has used all of its grant money to form (supplemented with other donations) the College of Medicine Scholarship Fund.

Physicians may donate to the medical school of their choice through AMA-ERF. One hundred percent of every dollar contributed to the Foundation goes for the purpose designated. Contributions designated for UK or UL of $100 or more entitle the donor to membership in the Century Club of the University of Louisville or the One Hundred Club at the University of Kentucky.

Donations (which are tax deductible) may be sent to:

AMA-ERF
535 North Dearborn Street
Chicago, Illinois 60610
or
Mrs. William R. Meeker, Jr.
AMA-ERF Chairman, Kentucky
417 Fayette Park
Lexington, Kentucky 40508
or

to the following county AMA-ERF Chairpersons:

Boyd-Carter-Greenup: Mrs. Lemar Meigs
Boyle: Mrs. Charles K. Mahaffey
Calloway: Mrs. C. C. Lowry
Campbell-Kenton: Mrs. David Cole
Daviess: Mrs. Glen Richards
Fayette: Mrs. Thomas Jarboe
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Muhlenberg: Mrs. Val Simpao
Pike: Mrs. Russell Davis
Pulaski: Mrs. Karl Strand
Rowan: Mrs. Ewell Scott
Warren-Edmundson-Butler: Mrs. Keith Coverdale
Whitley: Mrs. Keith Smith

BC-BS Policy Change Discussed with KMA

The KMA Group Contract with Blue Cross-Blue Shield has been negotiated, and became effective February 1, 1975. You will note that there is an increase of premiums amounting to about 30% across the board. This increase is justified according to our utilization over the past year. It was discouraging to learn that physicians are a poor risk group to insure. Our utilization is about 20% more than other groups. I am sure that we tend to be overly courteous in treating our families and our employees. However, I thought that our reciprocity and the application of our oath would more than offset this. The figures reveal that this is not the case.

I would like to urge each of you to consider the premiums we all pay when you treat members covered by our group insurance. Remember, if you treat the member and give them the insurance check, this does not reduce premiums. Let's try to reduce, as a group, our premium rates.

Many members of our group have indicated a desire to go to a Usual, Customary and Reasonable fee policy. Blue Cross and Blue Shield have agreed to make available a high and low option plan. The low option would be the present level of benefits. The high option would be 120 day semi-private, Usual, Customary and Reasonable Blue Shield and a $250,000 Major Medical plan.

Blue Cross has been very helpful toward a solution to this problem. They have agreed that if as many as six hundred participants, which is about one-third of our participants, want to go to the Usual, Customary and Reasonable policy, they will offer us both policies without changing our group rates. Of course, the UCR rates will be higher than the present policy rates. You should be receiving a notification in the mail from Blue Cross. This notice will be your only chance this year to indicate if you would like to change to the UCR policy. Please fill it out and send it back. If there are not six hundred interested participants we will not be eligible for the UCR coverage.

HAROLD HALLER, M.D.,
Chairman, KMA Business Management and Services Committee

Mark Your Calendar Now

for the

1975 KMA Annual Meeting

September 23-25

Ramada Inn/

Bluegrass Convention Center

Louisville

William P. McElwain, M.D., Bowling Green, was appointed Kentucky Health Services Commissioner in January by State Human Resources Secretary C. Leslie Dawson. Doctor McElwain also served as State Health Commissioner under former Governor Wendell Ford from 1970 to 1973.

The University of Louisville School of Medicine has announced the receipt of a $300,000 grant from the B. F. Goodrich Company to be used in research into the cause of angiosarcoma.

Albert M. Potts, Ph.D., M.D., has been appointed professor and chairman of the Department of Ophthalmology at the University of Louisville School of Medicine. Doctor Potts comes recently from the University of Chicago, where he was professor and director of research in ophthalmology.

The Kentucky Academy of Family Physicians announces its 24th Annual Scientific Session to be held May 14-17 at the Ramada Inn/Bluegrass Convention Center, Louisville. The program is acceptable for 14½ hours of prescribed credit by the American Academy of Family Physicians.

The Kentucky Occupational Medical Association will hold its annual meeting on May 9-10 at the Ramada Inn, Hurstbourne Lane, Louisville. The meeting is co-sponsored by the University of Louisville School of Medicine, and has been approved for Category I credit toward the AMA Physician's Recognition Award.

Nicholas J. Pisacano, M.D., Lexington, was recently renamed secretary of the American Board of Family Practice, the certifying body in the specialty of family practice.

The American Board of Family Practice announces that it will give its next two-day written certification examination on November 1-2, 1975. The exam will be held at five centers geographically distributed throughout the United States. Information regarding the examination may be obtained by writing: Nicholas J. Pisacano, M.D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington 40506. It is necessary for each physician desiring to take the examination to file a completed application with the Board office. **Deadline for receipt of applications in this office is June 15, 1975.**

In Memoriam

WILL ROWAN PRYOR, M.D.
Louisville
1897-1975

Will R. Pryor, M.D., died on February 1 at the age of 77. An ophthalmologist and otolaryngologist, Doctor Pryor graduated from the University of Louisville School of Medicine in 1924. He was on the faculty of the University of Louisville, and was an emeritus member of the Kentucky Medical Association. He was also a member of the American Medical Association, the American Academy of Ophthalmology and Otolaryngology, and the Jefferson County Medical Society.

AURA J. MILLER, M.D.
Louisville
1890-1975

A. J. Miller, M.D., 84, died February 6. A 1921 graduate of the State University of Iowa College of Medicine, Doctor Miller was a pathologist and former chairman of the department of pathology at the University of Louisville School of Medicine and General Hospital. He had also been chief pathologist at Jewish Hospital, and chairman of the Red Cross Blood Center's medical advisory committee for several years. An emeritus member of the Kentucky Medical Association, Doctor Miller was also a member of the American Medical Association, Jefferson County Medical Society, and the Innominate Society of Medical History.

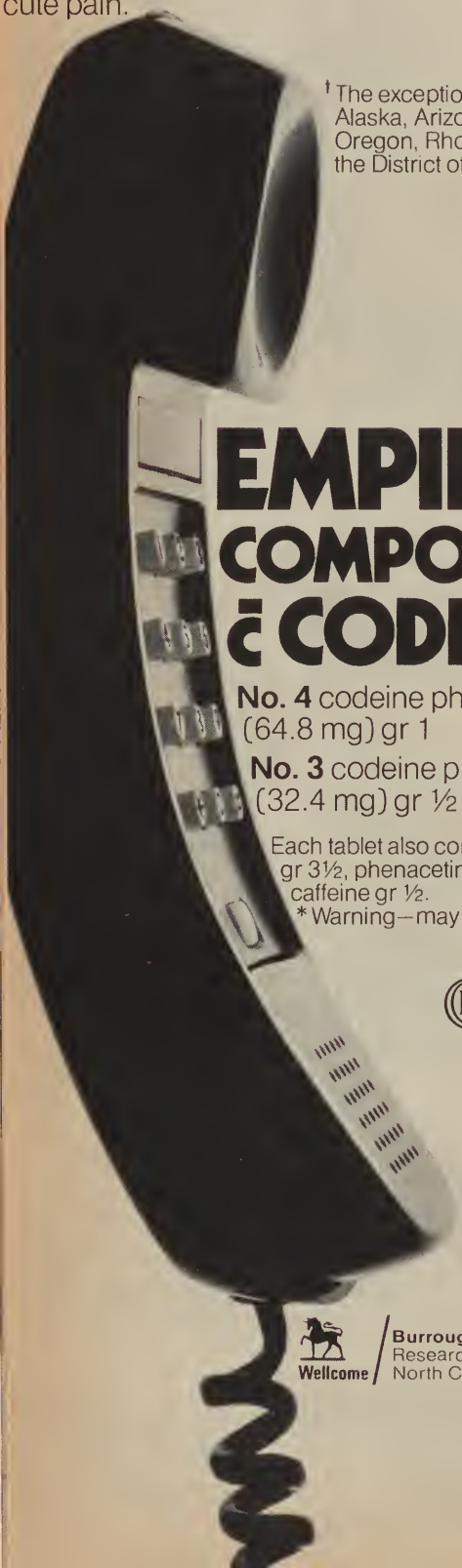
ANTONIO U. LIRA, M.D.
Covington
1927-1975

Antonio U. Lira, M.D., died February 9 at the age of 47. A general practitioner, Doctor Lira graduated from Manilla Central University in 1953. He was a member of the Kentucky Medical Association and the Boone-Campbell-Kenton Counties Medical Society.

The Pain Phone

When a telephone prescription for pain relief is necessary or convenient, you can call in your order for Empirin Compound with Codeine in 45 of the 50 states† That includes No. 4, which provides a full grain of codeine for more intense, acute pain.

† The exceptions: Alaska, Arizona, Maine, Oregon, Rhode Island, and the District of Columbia.



EMPIRIN® COMPOUND with CODEINE

No. 4 codeine phosphate* (64.8 mg) gr 1

No. 3 codeine phosphate* (32.4 mg) gr ½

Each tablet also contains aspirin gr 3½, phenacetin gr 2½, caffeine gr ½.

* Warning—may be habit-forming.

Ⓒ III

Wellcome | Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp.=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

One prescription can economically treat the entire family.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Pinworms, roundworms controlled with a single, non-staining dose of

ANTIMINTH®

(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

Data on file at Roerig.

Please see prescribing information on facing page.

Practice Management Workshop and . . . .

The Kentucky Medical Association, in conjunction with AMA, will once again sponsor a Practice Management Workshop especially designed for physicians who are planning to go into private practice. The workshop is conducted by nationally-recognized professional consultants who can provide expert advice on starting and managing a medical practice, assessing the advantages and disadvantages of going into a partnership or group practice, and overcoming current medicolegal problems. This full two-day program will be held April 22 and 23 at KMA Headquarters, and is limited to approximately 25 physicians in order to assure each participant ample opportunity to ask questions concerning his/her particular problems. Due to this limitation, registrations will be entered in the order in which they are received. Further information and registration forms may be obtained from the Headquarters Office.

Office Assistants Seminars To Be Held in Spring

The Second Annual seminars on Patient/Public Relations for the Office Assistant will be held as follows: March 13, 1975, Louisville; March 26, 1975, Lexington; April 24, 1975, Covington. (Please note dates were incorrectly printed on registration forms.) These seminars, which present public relations techniques to the personnel in doctors' offices, will once again be sponsored by KMA in conjunction with the Kentucky Chapter of the American Association for Medical Assistants. The seminars were extremely well attended last year, and we urge that reservations be made as soon as possible for 1975. Further information and registration forms may be obtained from the Headquarters Office.

WANTED: FAMILY PRACTITIONER TO JOIN GROUP

1. Rural community—city population 13,000, country population 60,000
2. Thirty privately practicing physicians in the community with nineteen specialists representing ten specialties
3. Highest per capita income in the state
4. Metropolitan Louisville and the University of Louisville Medical Center only forty minutes away
5. City school system ranked among the top five in the state
6. Excellent interstate highway system, both north-south and east-west
7. Organized Little League baseball, football, tennis, sailing, swimming (both indoor and outdoor public pools)
8. Five lakes nearby
9. Office is located adjacent to a 150-bed general hospital
10. Rotate nights, weekends, and holidays
11. Two months vacation each year
12. Excellent working conditions with established family physicians—good income
13. Well-run hospital
14. No purchase of equipment necessary

Anyone interested, please reply with curriculum vitae and date available to Service Bureau for Doctors.

LOUISVILLE: HURSTBOURNE/ PLAINVIEW AREA

High income level community of 78,000 (within two mile radius) with a desperate need for a Family Practitioner, OB-GYN physician, EENT physician, Internist and Ophthalmologist. We are builders and have a perfect location for lease. Contact SHERMAN & FLETCHER, Hurstbourne Medical Center, 304 Whittington Parkway, Hurstbourne Park, Louisville, Ky. 40222 or phone (502) 426-6300.

WANTED

One or two physicians to take over practice of retiring physician. Equipped office available. Only one full-time physician in county with new 28-bed hospital. Write to William M. Townsend, M.D., Falmouth, Kentucky 41040 or call 654-3376 or 654-2491

Disruptive anxiety usually meets its match here.

• Often effective when reassurance and counseling are insufficient.
• Three dosage strengths to meet most therapeutic needs.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

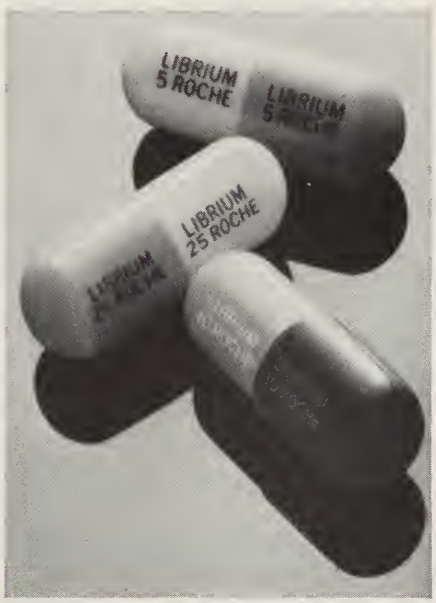
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions:

ORAL: In the elderly and debilitated and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six.

INJECTABLE: Keep patients under observation, preferably in bed, up to three hours after initial injection; forbid ambulatory patients to operate vehicle following injection; do not administer to patients in shock or comatose states; use reduced dosage (usually 25 to 50 mg) for the elderly or debilitated and for children age twelve or older.

ORAL AND INJECTABLE: Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating compounds such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual



precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

With the injectable form, isolated instances of hypotension, tachycardia and blurred vision have been reported; also hypotension associated with spinal anesthesia, and pain following I.M. injection.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral: Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

For Parenteral Administration: Should be individualized according to diagnosis and response. While 300 mg may be given during a 6-hour period, do not exceed this dose in any 24-hour period. To control acute conditions rapidly, the usual initial adult dose is 50 to 100 mg I.M. or I.V. Subsequent treatment, if necessary, may be given orally. (See Precautions.)

Supplied:

Oral: Librium® (chlordiazepoxide HCl) *Capsules*—5 mg, 10 mg, 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50, available singly and in trays of 10.

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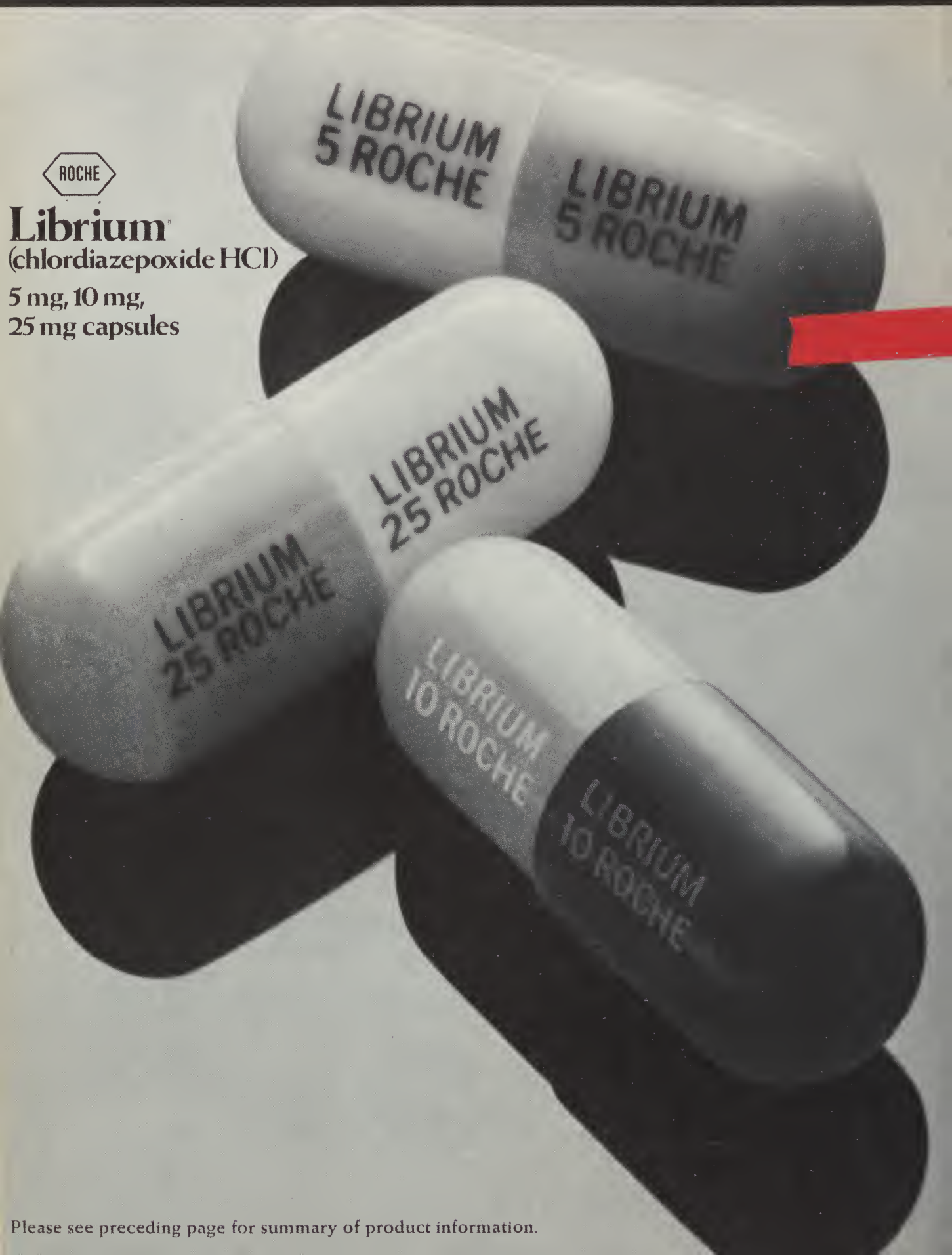
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Librium®
(chlordiazepoxide HCl)
5 mg, 10 mg, 25 mg capsules

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Disruptive anxiety usually meets its match here.



Please see preceding page for summary of product information.

W1
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The Journal of The
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Undiagnosed Mycoses—The Role of the Laboratory in Finding Cases in an Endemic Area
N. L. Goodman, Ph.D. and M. L. Furcolow, M.D.

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Licensure, Education and Disease Control
Arthur H. Keeney, M.D.

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1975

VOLUME 73 APRIL 1975 NUMBER 4

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

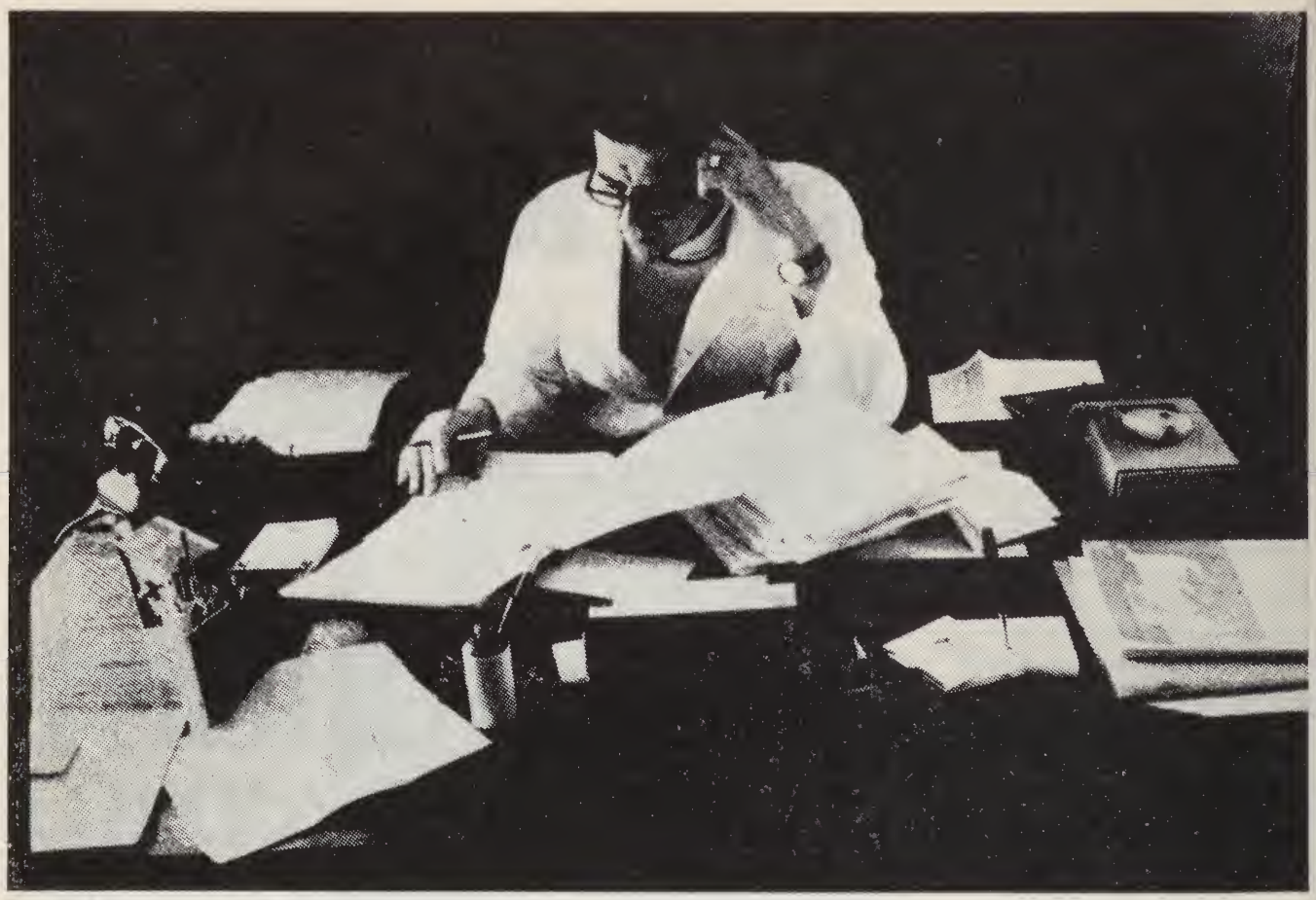
surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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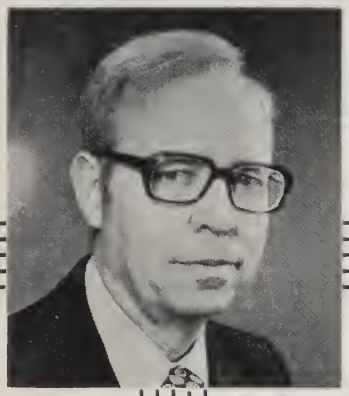
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MESSAGE FROM THE PRESIDENT



Forward March

LET us explore together corridors. Not the compassionate walls of your office. Neither the antiseptic and well-planned passageways of our hospital. How welcome if it were the majestic and hallowed halls of our unequaled medical schools. There might even be some assuagement if it were the stately glories housed in our legislative chambers.

No, it is none of the above. We are to dwell in the mysterious, shadowy byways of an arm of democracy not constitutionally delineated. It is the administrative bureaucracy of government.

We all memorized the legislative, the executive and the judicial designations along with the interrelated checks and balances—woe is us!! We today are inundated by a conglomerate mass almost immobile to outside influence, which even includes the three acknowledged arms of government.

Two brief examples. Recently a state medical leadership was told that a division head of a department had made promises that he had neither the fortitude nor integrity to deliver. On top of all, this particular area of state government for almost ten years had allowed medical services to be paid by an illegal mechanism even though it was known to the federal bureaucracy. When called to the attention of elected officials the response was, "We want to change it as soon as we can, but those fellows in the departments are hard to move."

At the federal level, this incident. An influential senator confronted the secretary of our biggest domestic cabinet. His enthusiasm and passion was funding of a desperately needed teaching hospital. There were funds available, the project had been approved by all as a priority I. This senator was capable of eloquency. He had reasonable strength to have influence in the selection of cabinet secretaries, but he was doomed in his efforts. Why? Later the truth surfaced. Within the department, bureaucracy had decreed against this need and cause—needless to report the senator, our champion, failed.

There has to be, of course, administration of the laws that are formulated and, indeed, there has to be administration of the executive branch's desires; but as you can see, intent and purpose subsequently falls to bureaucrats who are ongoing, who have continuity, and who at most levels have civil service and merit protection against replacement. Perhaps their greatest cover is the anonymity and invisible nature of the vast structure that exists. Thus, a key person in a key position can inflict his personal wishes and philosophy undetected and commonly undeterred by any recourse against his actions.

At present the only way to contravene these arbitrary and capricious actions is through the judiciary, as it is obvious to any seeking observer that the executive or legislative branches are appreciably ineffective to wrestle and govern this giant octopus of bureaus.

To change this it takes strong and willing organization confrontation. Ergo—this is one of the reasons the American Medical Association has sought redress by suing the Department of Health, Education and Welfare against their unwarranted imposition of concurrent review regulations on Medicare and Medicaid recipients. It's a landmark suit. Much of future history will evolve from the Federal Court's decisions.

All citizens, and especially we of medicine, must continue to work for the best possible candidates and seek the passage of quality laws but, foremost, we must now attack and expose bureaucratic distortions, deceits and their own type government control by massive indifference to appeal. If we don't, democracy is lost. If we don't, each individual citizen will continue to be diminished. If we don't, eventually all administrative control will reside in the bureaus and the free election process will be a farce and a public charade done only for the purpose of a lollipop to the indifferent masses.

HOYT D. GARDNER, M.D.

A Link in the Chain

auxiliary

AS we reach the three-quarter mark of our annual Auxiliary activities, some distinct trends are becoming apparent. Membership has increased, with notable interest being shown by new Members-at-Large. This is gratifying, as those women who live in our less-populated areas, have, perhaps, the greatest need to participate in the fellowship which is one of our primary goals. And when I speak of fellowship, I am not only referring to the social amenities, but also, the opportunity to exchange ideas on how we, as physicians' wives, can best be of assistance to our spouses.

Also, we have found an increasing interest being displayed by our members in the legal and legislative problems being faced by the medical profession. In an attempt to educate those persons who were unable to plan to attend one of the five "Medical Critical Dimension, 1975" seminars planned by Doctor Hoyt Gardner, WA-KMA planned a series of four legislative workshops. They were conducted by Mrs. Hoyt Gardner, WA-AMA Legislative Chairman and Mrs. George Schafer, WA-AMA Southern Region Legislative Chairman, and were entitled "Medical Legislation Today, Past, Present and Future". All physicians' wives were informed of the four locations, Pikeville, London, Cave City and Benton, and the dates on which they were to take place, during the last two weeks of February. You will note that **all** wives were notified, not just members of WA-KMA, as we feel that it is of overwhelming importance that all members of our medical community be educated, even if they have not as yet chosen to join us. We need informed friends today—and your auxiliary is doing it's best to produce them.

Currently, planning is underway for the Spring Board Meeting of WA-KMA, which will take place at Natural Bridge State Park, April 7 and 8. At this time, all state board members, which includes the presidents of the 26 organized auxiliaries, will give their annual reports, following which Mrs. Wally Montgomery, WA-KMA President-Elect, will conduct a work session, during which time she will formulate her plans for the coming year. All members of WA-KMA are cordially invited to attend and participate in this meeting, which has been entitled the "Phoenix Session" as we hope to rake through the ashes of this current year's endeavors and birth a new and vigorous program for the coming year!

MRS. RICHARD MCELVEIN
PRESIDENT, WA-KMA

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

APRIL

18-19	Kentucky EN&T Society Meeting, Barren River Reservoir
24-26	"Group Practice in Regional Health Care," Southeastern Region of AGPA, Health Occupation Building, Madisonville
24-26	Seminar on Law & Medicine*, UK Law Building Auditorium, Lexington. Fee: $65
24-26	"Diagnosis and Management of High Risk Pregnancy"**, HSC Auditorium, UL
26-29	Modern Management of Major Problems in Surgery**, Galt House, Louisville
30	Cardiology Workshop and Minor Orthopedic Procedures Workshop**, Louisville

MAY

5	Louisville Radiological Conference**, HSC and Galt House, Louisville
8	11th Annual Symposium on Rheumatic Diseases, HSC Auditorium, UL
9-10	Kentucky Occupational Medical Association, Ramada Inn, Louisville
12-16	Pediatric Radiology*, Lexington Hilton Inn, Lexington. Fee: $225
14-17	24th Annual KAFP Scientific Session, Ramada Inn, Louisville
23-24	Kentucky Surgical Society, Lake Barkley
27-28	Seminar on Alcoholism, Executive Inn, Louisville

JUNE

1-5	Surgery Review*, UK Medical Center, Lexington. Fee $175
4-5	Emergency Health Care Seminar, Executive Inn, Louisville
26	PAS Regional Quality Assurance Workshop, Louisville
26	Hypertension 1975*, UK Medical Center, Lexington. Fee: $20
27-28	Evaluation & Management of Cardio-Pulmonary Emergencies*, UK Medical Center, Lexington. Fee: $75

*For information, contact: Frank R. Lemon, M.D., Associate Dean of Extra-Mural Affairs, UK College of Medicine, Lexington 40506

**Contact: Gerald D. Swim, Director, Office of Continuing Education, UL School of Medicine

IN SURROUNDING STATES

APRIL

21-24	American College of Surgeons Spring Meeting, Regency Hyatt House & Marriott Motor Inn, Atlanta
21-24	"Recent Advances in Allergy", The Homestead, Hot Springs, Va
21-25	"Recent Progress in Endocrinology", University of Michigan Medical Center, Ann Arbor
23-25	Pulmonary Radiology, Indiana University School of Medicine, Indianapolis. Fee: $125
24-26	"Gastroenterology for Practicing Physicians", Meharry Medical College, Nashville

MAY

1-3	"Impact of Federal Regulation on the Health Delivery System," University of Toledo Law Center
5-7	3 Days of Cardiovascular Nursing, Marriott Inn, Clarksville, Ind
6-8	"Long Term Care for Aging and Handicapped Persons," National Graduate University, Cleveland, Ohio
14-15	Indiana Multidisciplinary Child Care Conference, Stouffer's Indianapolis Inn
19-23	"Advances in Internal Medicine", University of Cincinnati General Hospital and Medical Center
27-31	Diagnostic Roentgenology, Cincinnati General Hospital
29-31	Microneurosurgery Symposium, Cincinnati Convention Center

JULY

21-26	Current Concepts in Radiology, Atlantis Lodge, Atlantic Beach, North Carolina, sponsored by Duke University Medical Center
23-Aug 1	"Human Sexuality", Institute for Sex Research, Indiana University, Bloomington. Fee: $285

CONTINUING MEDICAL EDUCATION

CME Accreditation Program

KMA has been authorized by the AMA Council on Medical Education, to accredit qualified Kentucky hospitals, specialty societies, etc., for continuing medical education purposes.

The KMA Medical Education Committee has been charged with the responsibility of implementing this program and has defined the process by which interested organizations can make application for accreditation.

Potential applicant groups were contacted to determine their interests. After receiving a response, the Medical Education Committee will send detailed information on requirements for accreditation and on application will schedule observation visits with the applicant institutions or societies. The observation visit will usually last one day and the survey team will be composed of Medical Education Committee members, some of whom have served on similar AMA accreditation teams.

The survey team will report its findings to the Medical Education Committee which will review the application and the site visit report and make a recommendation to the KMA Board of Trustees for full accreditation, qualified accreditation, or non-accreditation.

The KMA program follows the same standards as the AMA Accreditation Program and is applicable to continuing medical education activities in Kentucky which do not usually draw participants from out of state. It is not ordinarily applicable to any institution that has or may receive AMA accreditation.

Mandatory Continuing Education

By mandate of the KMA House of Delegates, the Medical Education Committee has also been working on implementation of mandatory participation in continuing education. Resolution A, passed at the 1974 Session of the House of Delegates, called for mandatory CME as a requirement for re-registration of the license to practice and requested that the State Board of Medical Licensure institute this by regulation. Resolution A also incorporated proposed continuing medical education attainment standards for each specialty by triennium. Provision is made for modification of standards from time to time upon specialty society recommendation.

Provision will probably be made that the requirements that are to be established must be met within a three-year period, but completion of some other educational accomplishments may serve in lieu of these requirements. Comparable achievements might be recent national specialty board certification or re-certification. Exact details of this program are to be developed in coordination with the Licensure Board.

Because of the general interest in continuing medical education and the increasing involvement of KMA in CME activities, the Medical Education Committee has felt that a periodic report on its activities would be helpful to the membership. This page will not appear routinely, but only as necessary. For additional information on any of the items that appear, please contact the Headquarters Office.



Blue Shield of Kentucky 1974 Report

Membership

(as of December 31, 1974)

	1974	1973
Total Membership	1,338,387	1,295,571
Net Enrollment Gain (Members)	42,816	66,303
Percent of Net Increase	3.30%	5.39%
New Employee Groups Enrolled	1,459	1,333

Claims Experience

Type of Contract	Number of Claims Paid		Amount paid for Member Services	
	1974	1973	1974	1973
Indemnity	315,477	293,030	$13,272,037	$12,534,953
Usual, Customary and Reasonable	*271,772	194,090	12,683,786	8,560,337
Champus	* 17,872	14,562	1,574,122	1,305,846
Extended Benefits, BCBS Medicare Supplement, Major Medical and F.E.P. Supplemental	133,356	129,756	7,351,438	5,741,646
Grand Totals	**738,477**	**631,438**	**$34,881,383**	**$28,142,782**

*576 Usual, Customary and Reasonable and Champus claims, representing two-tenths of 1% of claims submitted, required Peer Review.

Blue Shield
of Kentucky

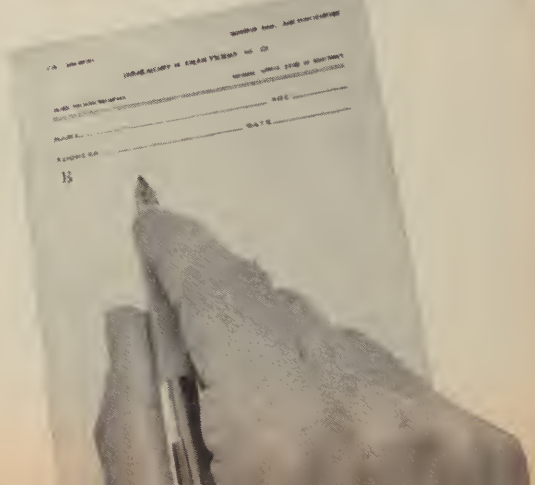
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The Cost of Health Care

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Bioequivalence



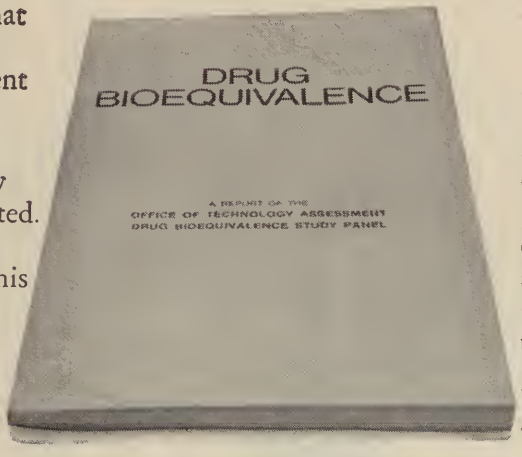
the weight of scientific opinion:

If the pharmacist substituted a chemically equivalent drug for the one you have specified for your patient—could you be certain of that product's safety and effectiveness simply because the chemical content was the same?

Definitely not, unless bioequivalence tests and other quality assurance checks had been conducted. The pharmaceutical industry and many scientists have maintained this position for years, but others have questioned it. Now the Office of Technology Assessment of the Congress of the United States has reported on the issue in its Drug Bioequivalence Study.*

Here are a few definitive statements in the O.T.A. report:

"...the problem of bioinequivalency in chemically equivalent products is a real one. Since the studies in which lack of bioequivalence was demonstrated involved marketed products that met current compendial standards, these documented instances constitute unequivocal evidence that neither the present standards for testing the finished product nor the specifications for materials, manufacturing process, and controls are adequate to ensure that ostensibly equivalent drug products are, in fact, equivalent in bioavailability.



"While these therapeutic failures resulting from problems of bioavailability were recognized and well documented, it is entirely possible that other therapeutic failures and/or instances of toxicity that had a similar basis have escaped attention."

The Pharmaceutical Manufacturers Association supports federal legislative amendments that would require manufacturers of duplicate prescription pharmaceutical products, subject to new drug procedures, to document:

(a) chemical equivalence; and

(b) biological equivalence, where bioavailability test methods have been validated as a reliable means of assuring clinical equivalence; or

(c) where such validation is not possible, therapeutic equivalence.

In addition, the PMA supports federal legislation that would require certification of all manufacturers of prescription products before they could start in business, annual inspections and certification thereafter, and strict adherence to FDA regulations on good manufacturing practices.

The overall quality of the United States drug supply is excellent. But only a total quality assurance program, envisaged in these and other policy positions adopted by the PMA Board of Directors in 1974, can bring about acceptable levels of performance by all prescription drug manufacturers and thereby assure the integrity of your prescription...

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*Copies of the complete report on Drug Bioequivalence may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

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CONTRAINDICATIONS: Aminophyllinc/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

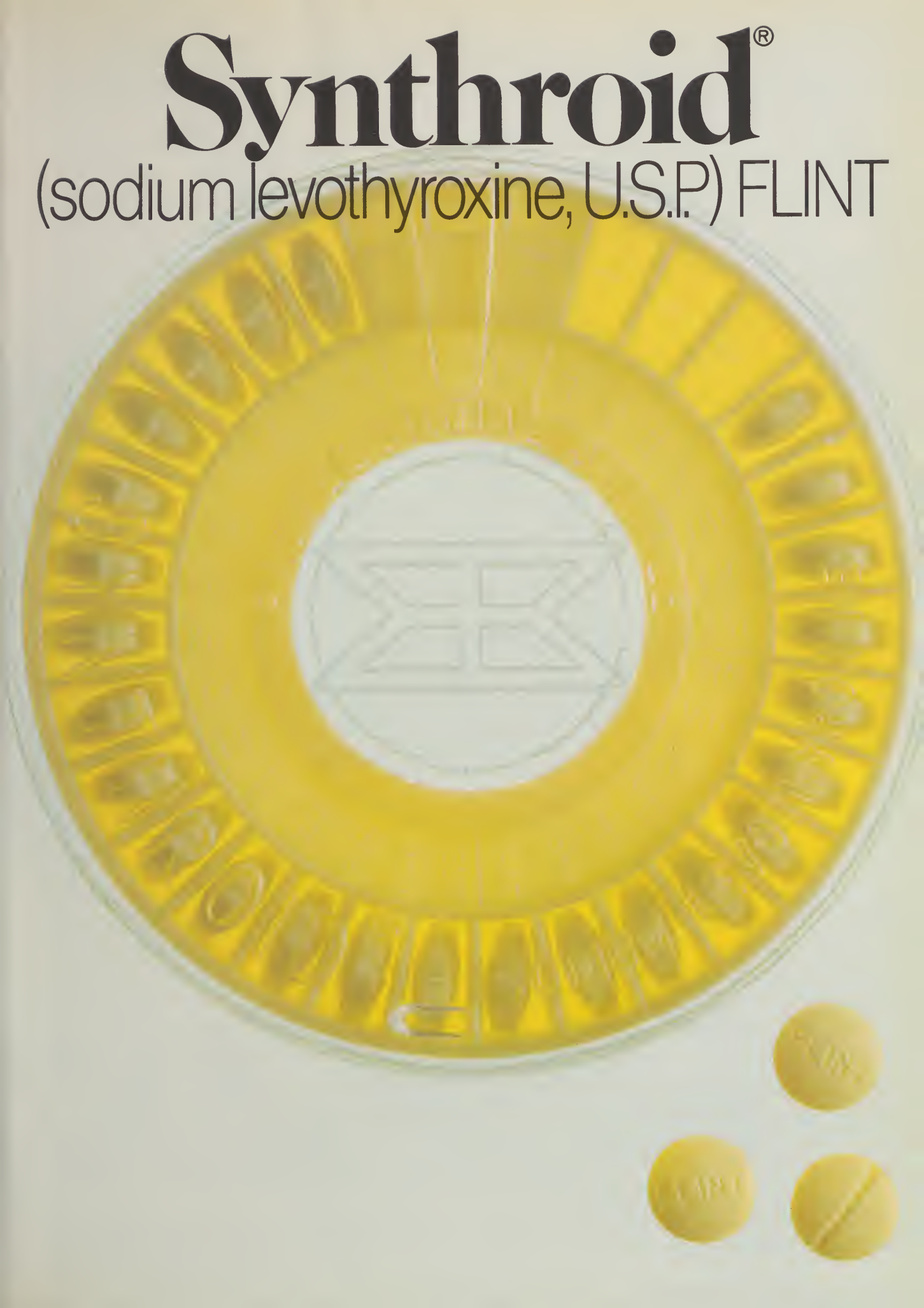
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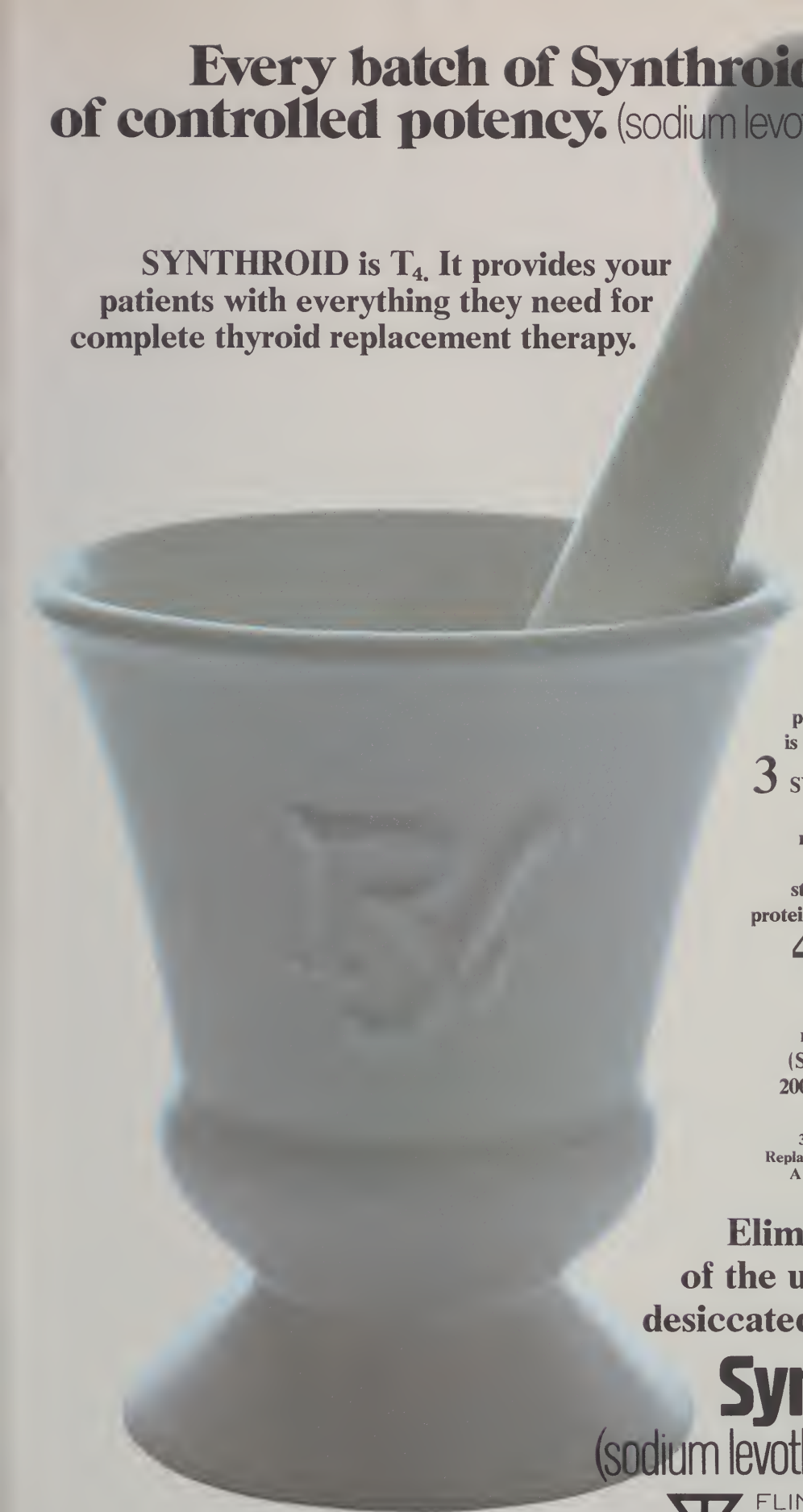
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4 The "usual maintenance dose" for the widely prescribed desiccated thyroid is "from 1 grain to 3 grains per day, but it may vary, in individual patients from 1/2 grain to 10 grains."[1] The "usual maintenance dose" of the most widely prescribed thyroglobulin (which is also a desiccated thyroid product) is "0.5 to 3.0 grains daily."[2]

1. Armour Thyroid (Tablets). 1975 Physicians' Desk Reference. p. 561.
2. Proloid® (thyroglobulin). 1975 Physicians' Desk Reference. p. 1575.

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3. Stock, J.M., Surks, M.I., and Oppenheimer, J.H.: Replacement dosage of L-thyroxine in hypothyroidism. A re-evaluation. New Engl. J. Med. *290*:529-33, 1974.

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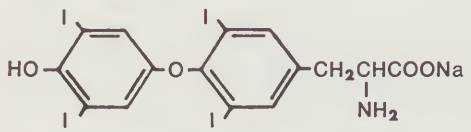
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Description

SYNTHROID (sodium levothyroxine) **Tablets** and SYNTHROID **Injection** contain synthetic crystalline sodium levothyroxine (L-thyroxine). L-thyroxine is the principal hormone secreted by the normal thyroid gland.



Sodium Levothyroxine

Actions

SYNTHROID (sodium levothyroxine) **Tablets**, taken orally, provide hormone that is readily absorbed from the gastrointestinal tract. SYNTHROID **Injection** is effective by any parenteral route. Following absorption, the synthetic L-thyroxine provided by SYNTHROID products cannot be distinguished from L-thyroxine that is endogenously secreted. Each is bound to the same serum proteins and each exhibits a six to seven day circulating half-life in the euthyroid individual.

Both SYNTHROID products will provide L-thyroxine as a substrate for physiologic deiodination to L-triiodothyronine. Therefore, patients taking SYNTHROID products will demonstrate normal blood levels of L-triiodothyronine even when the thyroid gland has been surgically removed or destroyed by radioiodine. Administration of levothyroxine alone will result in complete physiologic thyroid replacement.

Indications

SYNTHROID (sodium levothyroxine) products serve as specific replacement therapy for reduced or absent thyroid function of any etiology. SYNTHROID **Injection** can be used intravenously whenever a rapid onset of effect is critical, and either intravenously or intramuscularly in hypothyroid patients whenever the oral route is precluded for long periods of time.

Contraindications

There are no absolute contraindications to SYNTHROID (sodium levothyroxine) therapy. Relative contraindications include acute myocardial infarction, uncorrected adrenal insufficiency and thyrotoxicosis. (See WARNINGS)

Warnings

Patients with cardiovascular diseases warrant particularly close attention during the restoration of normal thyroid function by any thyroid drug. In such cases, low initial dosage increased slowly by small increments is indicated. Occasionally, the cardiovascular capacity of the patient is so compromised that the metabolic demands of the normal thyroid state cannot be met. Clinical judgment will then dictate either a less-than-complete restoration of thyroid status or reduction in thyroid dosage.

Endocrine disorders such as diabetes mellitus, adrenal insufficiency (Addison's disease), hypopituitarism and diabetes insipidus are characterized by signs and symptoms which may be diminished in severity or obscured by hypothyroidism. SYNTHROID (sodium levothyroxine) therapy for such patients may aggravate the intensity of previously obscured symptoms and require appropriate adjustment of therapeutic measures directed at these concomitant disorders.

Thyroid replacement may potentiate the effects of anticoagulants. Patients on anticoagulant therapy should have frequent prothrombin determinations when instituting thyroid replacement to gauge the need to reduce anticoagulant dosage.

Precautions

Overdosage with any thyroid drug may produce the signs and symptoms of thyrotoxicosis, but resistance to such factitious thyrotoxicosis is the general rule. With SYNTHROID (sodium levothyroxine) **Tablets**, the relatively slow onset of action minimizes the risk of overdose but close observation in the weeks following institution of a dosage regimen is advised. Treatment of thyroid hyperactivity induced by oral medication is confined to interruption of therapy for a week, followed by reinstitution of daily therapy at an appropriately reduced dosage.

Adverse reactions

Adverse reactions are due to overdose and are those of induced hyperthyroidism.

Dosage and administration

For most adults, a final dosage of 100 mcg (0.1 mg) to 200 mcg (0.2 mg) of SYNTHROID (sodium levothyroxine) **Tablets** daily will restore normal thyroid function and only occasionally will patients require larger doses. Failure to respond adequately to a daily oral intake of 400 mcg (0.4 mg) or more is rare and should prompt reconsideration of the diagnosis of hypothyroidism, special investigation of the patient in terms of malabsorption of L-thyroxine from the gastrointestinal tract or poor adherence to therapy.

The concomitant appearance of other diseases, especially cardiovascular diseases, usually dictates a replacement regimen with initial doses smaller than 100 mcg/day (0.1 mg).

In otherwise healthy adults with relatively recent onset of hypothyroidism, full replacement dose of 150 mcg (0.15 mg) or 200 mcg (0.2 mg) has been instituted immediately without untoward effect and with good therapeutic response. General experience, however, favors a more cautious approach in view of the possible presence of subclinical disorders of the cardiovascular system or endocrinopathies.

The age and general physical condition of the patient as well as the severity and duration of hypothyroid symptoms determine the starting dosage and the rate of incremental dosage increase leading to a final maintenance dosage. In the elderly patient with long standing disease, evidence of myxedematous infiltration and symptomatic, functional or electrocardiographic evidence of cardiovascular dysfunction, the starting dose may be as little as 25 mcg (0.025 mg) per day. Further incremental increases of 25 mcg (0.025 mg) per day may be instituted at three to four week intervals depending on patient response. Conversely, otherwise healthy adults may be started at higher daily dosage and raised to the full replacement dosage in two to three weeks. Clearly it is the physician's judgment of the severity of the disease and close observation of patient response which determines the rate of dosage titration.

Laboratory tests to monitor thyroid replacement therapy are of limited value. Although measurement of normal blood levels of thyroxine in patients on replacement regimens frequently coincides with the clinical impression of normal thyroid status, higher than normal levels on oral replacement of levothyroxine occasionally occurs and should not be considered evidence of overdosage per se.

In all cases, clinical impression of the well-being of the patient takes precedence over laboratory determination in determining the appropriate individual dosage.

In infants and children, there is a great urgency to achieve full thyroid replacement because of the critical importance of thyroid hormone in sustaining growth and maturation. Despite the smaller body size, the dosage needed to sustain a full rate of growth, development and general thriving is higher in the child than in the adult, as much as 300 mcg (0.3 mg) to 400 mcg (0.4 mg) per day.

In myxedema coma or stupor, without concomitant severe heart disease, 200 to 500 mcg of SYNTHROID **Injection** may be administered intravenously as a solution containing 100 mcg/ml. Although the patient may show evidence of increased responsivity within six to eight hours, full therapeutic effect may not be evident until the following day. An additional 100 to 300 mcg or more may be given on the second day if evidence of significant and progressive improvement has not occurred. Like the oral dosage form, SYNTHROID **Injection** produces a predictable increase in the circulating level of hormone with a long half-time. This usually precludes the need for multiple injections but continued daily administration of lesser amounts intravenously should be maintained until the patient is fully capable of accepting a daily oral dose.

In the presence of concomitant heart disease, the sudden administration of such large doses of L-thyroxine intravenously is clearly not without its cardiovascular risks. Under such circumstances, intravenous therapy should not be undertaken without weighing the alternative risks of the myxedema coma and the cardiovascular disease. Clinical judgment in this situation may dictate smaller intravenous doses of levothyroxine.

SYNTHROID **Injection** by intravenous or intramuscular routes can be substituted for the oral dosage form when ingestion of SYNTHROID **Tablets** is precluded for long periods of time.

How supplied

SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in 6 concentrations: 25 mcg (0.025 mg)—orange . . . 50 mcg (0.05 mg)—white . . . 100 mcg (0.1 mg)—yellow . . . 150 mcg (0.15 mg)—violet . . . 200 mcg (0.2 mg)—pink . . . 300 mcg (0.3 mg)—green. Depending on strength, these tablets are available in bottles of 100, 500, 1000 and 5000.

SYNTHROID (sodium levothyroxine) for **Injection** is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, U.S.P. A separate 5 ml vial containing Sodium Chloride Injection, U.S.P. is provided as a diluent.

Directions for reconstitution

Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml of the Sodium Chloride Injection, U.S.P. to the vial. Shake vial to insure complete mixing. **Use immediately** after reconstitution. Discard any unused portion.

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VOLUME 73 APRIL 1975 No. 4

Undiagnosed Mycoses—The Role of the Laboratory in Finding Cases in an Endemic Area

N. L. GOODMAN, Ph.D. and M. L. FURCOLOW, M.D.*
Lexington, Kentucky

The diagnosis of systemic mycoses can be greatly facilitated by the use of available fungal serological tests and subsequently following up on those patients with a positive serology by culturing multiple sputum specimens.

IT has been estimated that there are more than 300,000 cases of systemic fungal disease in the United States each year and that approximately 40 million people in the United States are infected with *Histoplasma capsulatum* alone, with an estimated 200,000 new infections per year.[1,3] Furcolow, et al. have estimated an incidence of 440 cases of blastomycosis per year in Kentucky.[2] From this great pool of estimated infected people, only 2,233 cases of systemic fungal disease were reported in 1969.[1]

From these statistics and estimates, it is obvious that a large number of mycoses are not being diagnosed, or are being mis-diagnosed. We think this is especially true in the endemic area of histoplasmosis and blastomycosis, with Kentucky at the geographic center.

Our experience over the past few years has shown that the efficiency in diagnosing the fungal disease is markedly increased when the physician and the laboratory microbiologist work closely together to obtain the proper specimens at the proper time, so they may be processed in the laboratory under the most ideal conditions.

This report is to point out some of the factors we have found important in the diagnosis of fungal disease, primarily histoplasmosis. The studies were carried out at the Mycology Reference Laboratory, University of Kentucky Medical Center, and the CDC Field Station, Kansas City, Kansas.

The Kentucky studies were made primarily on the patients of six state Tuberculosis Hospitals. The state was divided into 6 districts for the Tuberculosis Control Program. Each district was served by a state Tuberculosis hospital which also cared for patients with fungal diseases. The CDC study was also on patients from Tuberculosis Hospitals who were involved in a cooperative study group.

In our protocol, all patients on admission to the state hospitals had a fungal serology performed. The test was the complement-fixation test with a battery of antigens consisting of: histoplasmin, and whole yeast cells of *H. capsulatum* and *B. dermatitidis*. A titer of 1:8 on any antigen was considered significant.

A series of six consecutive sputa were to be collected from all patients with a positive serology. This was an arbitrary number considered to be practical; however, for varying reasons, this number was not collected in many cases.

In the Kentucky study, a total of 2360 sera were collected, of which 402 showed a C-F

*Department of Community Medicine, University of Kentucky Medical Center, Lexington
Paper received at KMA: 2-3-75

TABLE 1

ISOLATIONS OF HISTOPLASMA CAPSULATUM AND BLASTOMYCES DERMATITIDIS RELATIVE TO C-F TITER

C-F Titer		No. Patients no sputum submitted	Sputum Received No. Isolations No. Patients	% Positive
Histoplasma Mycelium pos. Yeast neg.		6	0/8	0
Yeast	1:8	90	4/121	4.8
	1:16	74	7/82	8.5
	1:32	27	9/80	11.2
	≥1:64	1	9/23	39.1
	Total	198	29/204	14.2

titer of 1:8 or greater: **a 17% sero-positive rate.** Figures published in the 1972 *CDC Mycoses Surveillance Report* showed that 12% of the sera submitted to the Kentucky State Health Department were positive.

The percent sero-positive in each TB-control district is shown in Figure 1.

There is a relatively even distribution throughout the state, with the exception of District 4, where there was only a 12% sero-positive reactor rate. District 3 showed the highest reactor rate with 25%.

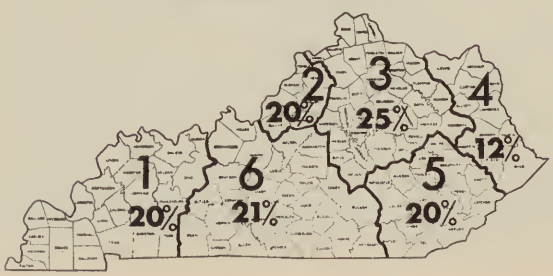
It is interesting to compare this distribution with the distribution of histoplasmin skin test reactors in Kentucky (Figure 2).

Note the serology reactor rate parallels closely the skin test reactor rate; however, one cannot reliably use skin reactions in this area for diagnosis.

Now that we have seen the rates of sero-positive individuals in a population, what relationship does this have with the frequency of diagnosing the disease? There are at least two factors that apparently govern this; **the serologic titer** and the **number of specimens submitted for evaluation.**

FIGURE 1

REGIONAL DISTRIBUTION OF PATIENTS WITH COMPLEMENT FIXING ANTIBODIES TO HISTOPLASMA CAPSULATUM AND BLASTOMYCES DERMATITIDIS IN KENTUCKY



These are illustrated in Tables 1 and 2. Table 1 shows the results of the Kentucky study.

The first column shows the C-F titer, and the second column, the number of sero-positive patients with no sputum submitted. In other words, we had no chance to isolate the organism. Column 3 shows the number of isolations of *H. capsulatum* and *B. dermatitidis*/ total number of sero-positive patients with a specimen submitted for culture. Column 4 shows the percent culturally positive relative to C-F titer.

As one might expect, there was an increased isolation rate with an increased C-F titer. The percent isolations ranged from 4.8% upward. A 14% isolation rate was obtained from all specimens submitted from sero-positive patients.

Table 2 shows the information from the CDC study relative to C-F titers and the number of specimens submitted.

Both increased titer and the number of specimens submitted influence the efficiency in isolating the fungus.

Note that in those patients with a titer of 1:8, from whom six or more specimens were cultured, 11 of 72, or 15%, were positive. This is especially significant, since many physicians disregard a 1:8 titer as being insignificant. Also, note that there is an increased frequency of isolations, in patients with a titer of 1:64 or greater, with a greater number of specimens submitted.

The column on the extreme right shows the percent isolations relative to the number of sputa submitted per patients: 6% with only one specimen submitted to 27% with six or more specimens submitted.

Figure 2

Percentage of Positive Reactors to Histoplasmin among 951 University of Kentucky Students (Lifetime residents of I county) 1963.

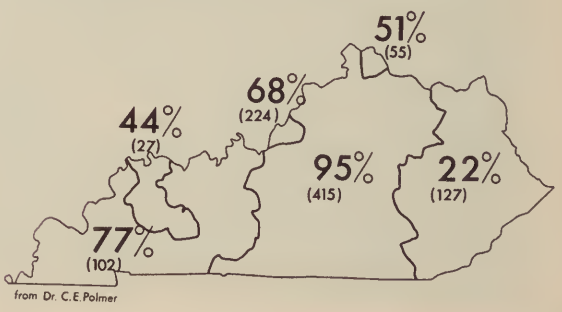


TABLE 2

COMPARISON OF ISOLATIONS BY NUMBER OF SPUTA SPECIMENS AND TITERS OF SEROLOGY

Results at Central Laboratory and Missouri State Sanatorium

No. Sputa per Patient	Titer unknown or serology not done	HISTOPLASMA Mycel. pos. Yeast neg.	Yeast Titer				Culture Positive Pts. w/Pos. serology	
			1:8	1:16	1:32	1:64	#	%
0		115	271	133	48	12	579	0
1	2/86	0/7*	0/15	0/4	0/2	2/5	2/33	6
2	0/13	0/6	0/14	2/7	0/4	0/2	2/33	6
3	0/36	0/5	0/17	1/9	0/6	5/6	6/43	14
4	0/11	0/3	0/16	0/7	4/5	1/3	5/34	15
5	1/13	0/6	1/18	0/5	3/8	4/5	8/42	19
6	5/34	6/36	11/72	13/45	14/25	8/14	52/192	27
Total Sera	—	178	423	210	98	47	956	—
No. Patients Cultured	193	63	152	77	50	35	377	—
No. Patients with Positive Cultures	8	6	12	16	21	20	75	—
Percent with Positive Cultures	4	10	8	21	42	57	20	—

$\frac{\text{Number Culturally Positive}}{\text{Number of Patients}}$

Also, note the bottom line of the table where the percent of patients with positive cultures are listed relative to the serologic titer from 8% with a 1:8 to 57% isolations with a 1:64 or greater.

A summary of these data is shown in Table 3.

The figures show that the C-F titer is a good indicator of infection and disease, and can be used as a valuable tool in diagnosing histoplasmosis. The optional use of the C-F titer in diagnosis is, however, dependent upon the submission of multiple specimens for culture, because the disease cannot be correctly diagnosed without demonstrating the organism by culture.

Unfortunately, not all are aware of, or believe in, the importance of these two factors. Let us examine some figures to see what the results would be if at least six sputum specimens had been collected from all sero-positive patients identified in Kentucky. Refer to Table 1.

We see here an over-all recovery rate of 14.2% from all sero-positive patients. Note that there were 198 patients in the study from whom no sputa were collected. Applying the 14.2% to the 198, we have an expected number of 28 more isolations. That is, if we had had adequate specimens from all patients in the study, we would have had 57 cases of histoplasmosis and blastomycosis instead of 29.

Now let's examine Kentucky data reported in the *CDC Mycoses Surveillance Report,* 1972. It is reported that 5,677 sera were submitted to the Kentucky State Laboratory for serology for histoplasmosis and blastomycosis. There were 691 reported positive, or 12% of the total sera.

Using our 14.1% recovery rate (691 x .141), we would expect to have had 97 additional cases from this population, for a total of 154 cases of histoplasmosis and blastomycosis in Kentucky. There were 35 cases reported, including 33 from our studies.

From these studies it appears obvious that a large number of cases of histoplasmosis and blastomycosis are going undiagnosed or misdiagnosed. We submit that this problem can

TABLE 3

POSSIBLE ISOLATIONS BY TITER AND CULTURES

No. sputa submitted	Titer $\geq$ 1:16		
	No. Patients Cultured	No. Isolations	% Isolations
1-5	78	22	28
6 or more	84	35	42

be alleviated if more attention is given to the utilization and interpretation of the complement-fixation test and the submission of multiple sputa from the sero-positive patients.

This is, of course, dependent upon good serological and mycological procedures carried out by highly competent and well-trained microbiologists.

In summary, the diseases are here. The diagnosis depends on these factors:

1. An available serologic laboratory to perform the tests.

2. A laboratory that enables us to recognize the fungi when specimens are submitted.

3. Physicians who will utilize the laboratory, for the appropriate tests will be able to diagnose considerably more cases of systemic mycoses in Kentucky.

References

1. *U.S. National Communicable Disease Center Mycoses Surveillance,* No. 1, April, 1969.
2. Unpublished data.
3. Furcolow, M. L., Busey, J. F., Menges, R. W., Chick, E. W.: Prevalence and incidence studies of human and canine blastomycosis II. Yearly incidence studies in three selected states 1960-1967. *Am. Jour. Epidemiology* 92(2):121-131, August, 1970.

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The Physiologic Basis of Hypoazotemia

Mohammad Amin, M.D. and Joseph M. Blandford, M.D.*
Louisville, Kentucky

The term hypoazotemia is applied to the lower-than-normal level of blood urea nitrogen (BUN). Its physiologic basis in various conditions is discussed and clinical value elucidated. In a study of all the BUN values in December 1973 at Louisville General Hospital, hypoazotemia was encountered in 27.9% of the cases. The reasons for hypoazotemia of 5 mg% or less were possible liver dysfunction (48%), intravenous fluid therapy (34.7%), pregnancy (12%), and anxiety states (5.3%).

A frequently performed laboratory procedure is the measuring of blood urea nitrogen (BUN). Almost total emphasis is placed on abnormally high levels; little attention is paid to an abnormally low level of BUN. The term azotemia, which literally means the presence of urea or other nitrogenous material in the blood, is used exclusively to denote the increase in BUN. Hyperazotemia,[1] although rarely used, is the correct term to describe abnormally large amounts of nitrogenous matter in the blood (Fig. 1). Hypoazotemia, which should mean abnormally low BUN, could not be found in the literature. Probably there was no need for such an expression in our daily practice, as the significance of high BUN overshadows any importance of low BUN. In our experience, however, hypoazotemia is not only a common but also a significant finding.

Material and Methods

The BUN values were determined in the clinical laboratory of the Louisville General Hospital, a 380-bed community hospital, by sequential multiple analyzer.** The study is limited to all BUN tests performed in the month of December, 1973. The normal range of BUN by this method is 10-20 mg%. All values below 9 mg% were considered hypoazotemic. Clinical records of all patients having a BUN value of 5 mg% or less were studied in detail to substantiate the etiology of hypoazotemia.

Results

During December, 1973, 2,157 samples of blood were analyzed for BUN. 602 determinations (27.9%) were below the level of 10 mg%; 133 values (6.17%) showed BUN of 5 mg% or less. The latter 133 tests were performed on 78 patients, with 55 as repeat determinations on the same 78 patients. The clinical records of 75 of these patients were reviewed; three could not be traced. Forty-nine women and 26 men comprised this group. The BUN levels ranged from less than 1 mg% to 5 mg% in the 75 patients. The lowest value observed was 0.3 mg% in a 52-year-old woman undergoing profuse diuresis with intravenous fluids and mannitol for Mercurochrome ingestion. Table 1 gives the etiologic distribution of the 75 patients with hypoazotemia of 5 mg% or less.

Discussion

Contrary to general belief, hypoazotemia is a common laboratory finding but is often unnoticed by the physician. It was found in 27.9% of 2,157 BUN determinations studied. Hypoazotemia of 5 mg% or less was found in 6.17% and these 75 patients were studied in detail to analyze conditions associated with this finding.

HYPERAZOTEMIA	EXCESS OF NITROGENOUS MATTER IN THE BLOOD
AZOTEMIA	THE PRESENCE OF UREA OR NITROGEN IN THE BLOOD
HYPOAZOTEMIA	DEFICIENCY OF NITROGENOUS MATTER IN THE BLOOD

FIGURE 1

*Section of Urology, Department of Surgery, University of Louisville School of Medicine
Paper received at KMA: 12-6-74

**Technicon SMA 6/60

TABLE 1

POSSIBLE ETIOLOGY OF HYPOAZOTEMIA

	No. Patients	%
Possible liver dysfunction	36	48
Intravenous fluids	26	34.7
Pregnancy	9	12
Anxiety, Psychosis, Neurosis	4	5.3
Total	75	100%

TABLE 2

POSSIBLE CAUSES OF LIVER DYSFUNCTION

	No. Patients
Alcoholism, Cirrhosis	29
Infectious Hepatitis	3
Jaundice—Stone Bile Duct	1
Jaundice—Multiple Surgical Procedure on G.I. tract	1
Hepatomegaly—Jejunoileal Bypass	1
Hepatic Artery Ligation + Whipple's Operation	1
Total	36

Possible Liver Dysfunction

Evidence of liver dysfunction was found in 48% (36 patients) of the 75 patients with hypoazotemia. Table 2 shows the distribution of patients with various conditions giving rise to possible liver dysfunction. All patients showed derangement of their liver function tests, though a complete battery of tests was not always available. Brownstein and Scherl[2] reported low blood urea levels concomitant with liver disease in their documented control study. The reasons for the hypoazotemia in liver disease are not very clear. Because most urea is synthesized in the liver from ammonia, hypoazotemia may result from a decrease in synthesis of urea. Other possible explanations include decreased intake of proteins or expanded plasma volume with increased glomerular filtration. Rabinowitch[3] in 1929 reported a case of acute yellow atrophy of liver in which no urea could be detected in the blood despite repeated testing. This hypoazotemia is only possible in the presence of normal renal function. On the other hand, renal failure may be, on occasion, associated with cirrhosis, but will not be discussed here.

In our study, possible liver dysfunction was the most common cause of hypoazotemia of 5 mg% or less. An awareness of this association should be used as a diagnostic tool. In some of our patients, liver dysfunction was not fully realized, especially when the patients were managed by a subspecialty service. For example, a patient on the orthopaedic service with BUN of 5 mg% underwent bone grafting of the left femur for non-union of an old fracture. His postoperative course was complicated by osteomyelitis, pulmonary embolism, and jaundice. He died after a prolonged illness with hepatorenal failure. Initial hypoazotemia in this patient should have prompted further investigation of his liver function. If carried out pre-operatively, this could have led to a greater awareness of his potential problem and to a different management.

Intravenous Fluid Therapy

Twenty-six patients or 34.7% (Table 1) of the total were receiving large volumes of intravenous fluids free of nitrogenous compounds. This produced diuresis causing increased urine flow in the tubules, which in turn diminished tubular re-absorption of urea. This phenomenon of marked reduction in tubular absorption of urea under conditions of rapid hydration has been shown in rats,[4] dogs,[5] rabbits,[6] and man.[7] The increased urea clearance with decreased nitrogen intake may be the cause of hypoazotemia in patients on intravenous fluids. In a study by Gallagher and Seligson,[8] this was the most common cause of hypoazotemia of 3 mg% or less. They considered it to be a good prognostic sign indicating good diuresis and good kidney function.

Pregnancy

Nine persons or 12% of the total were found to be pregnant (Table 1). The stage of pregnancy ranged from first trimester to near term. The cause of hypoazotemia in pregnancy is not very well understood. Renal function has been studied during pregnancy by several investigators.[9-11] The most striking changes involve the increases in glomerular filtration rate (GFR) and renal plasma flow (RPF). According to Smith,[21] "A pregnant woman is a very interesting phenomenon. I do not know any other way to increase the filtration rate by 50% or better for prolonged periods." This hypoazotemia of pregnancy was also found to be of diagnostic importance, as illustrated by the following case report.

A 29-year-old, healthy, unmarried sister of a kidney transplant recipient was investigated routinely as a potential kidney donor. BUN levels were 6 and 7 mg% two days before the

scheduled nephrectomy. Pregnancy was suspected on the basis of this hypoazotemia but denied by the patient. Pregnancy tests were positive, and she underwent therapeutic abortion because of radiation to the uterus during donor testing. An investigation is underway, but the preliminary results show that hypoazotemia is found in a high percentage of patients in very early pregnancy.

Anxiety, Psychoses, and Neuroses

Four patients or 5.3% of the total (Table 1) came under the classification of anxiety, psychoses, and neuroses. All were patients being managed by the psychiatric service. One patient was also a known alcoholic, but no investigation was carried out to check the liver function. Casey and colleagues[13] reported significant hypoazotemia and hyperalbuminemia in patients with anxiety, neuroses, and psychoses. The explanation they suggested was increased production of albumin from arginine, which is also the precursor of urea. Some congenital or acquired enzyme defect may increase the production of albumin from arginine but diminishes the production of urea by the liver.

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Diagnosis of Tuberculosis in a General Hospital

J. R. Coyer, M.D. and David P. Nicholson, M.D.*
Lexington, Kentucky

Tuberculosis patients are being encountered more frequently on general medical and surgical services. It is important that the diagnosis be considered in suspicious cases, in order to achieve early confirmation and initiation of treatment.

THE Lexington, Kentucky, Veterans Administration Acute Care Division at Cooper Drive opened on June 25, 1974. There were 330 active beds of which 100 were allotted to the Medical Service. A total of 2,701 patients were admitted to the Medical Service during the first year, and in 27, or 1%, a diagnosis of active pulmonary tuberculosis was reached.

New active cases of tuberculosis in Kentucky remain at approximately 700 each year, a rate of over 20 per 10^5 population, and seventh highest in order of the states.[1] The Cooper Drive Division of the Lexington Veterans Administration Hospital adjoins the University of Kentucky Medical Center, and the two hospitals share a joint house staff training program.

It is now commonplace, and recommended, for tuberculosis patients to be admitted and treated in general hospitals, provided certain precautions are instituted.[2,3] However, none of these 27 patients were admitted with a diagnosis of tuberculosis, and so initially they may have represented a hazard to the staff and to other patients. These 27 patients will be described, together with some comments on the methods of diagnosis and the delays experienced.

Clinical Description

Not unexpectedly, all 27 patients were males, median age 53, composed of 25 pulmonary, one localized extra-pulmonary, and one combined infection.

Presenting symptoms were noted in 23, but were absent in 4. Symptoms, in order of frequency were: weight loss in 13 (mean 10 kg), cough in 13, and dyspnea on exertion in 10. Fever, malaise, chills, night sweats, or hemoptysis was recorded in less than a quarter of the patients. Other presenting manifestations, in single instances, were anemia, hoarseness, painful knee, epigastric pain, hepatic coma, and stupor with meningitis.

The lungs were involved in 26 cases, and the extent of disease is shown in Table 1. Two patients had a history of previous tuberculosis, and 6 of known recent exposure. One individual had been taking isoniazid the previous year for a positive tuberculin skin test. He presented with a small nodule in the anterior segment of the right upper lobe, and his sputum was smear positive and culture negative.

The PPD (intermediate strength, stabilized) was greater than 10 mm in 13, less than 5 mm in 7, and was not done in a further 7. One patient with a negative skin test had a previous test recorded elsewhere of 13 mm. The diagnosis of active tuberculosis was established in a number of ways (Table 2). Six patients presented with serosal effusions and, in all but one of this group, a positive culture was obtained from sputum, fluid, or local biopsy.

A delay in diagnosis of two days to five weeks occurred in 18 of the 27 patients, and the reasons for this were not always apparent. Most of the delays appeared to stem from a

TABLE 1

EXTENT OF DISEASE

Pulmonary

Minimal	Mod: Advanced	Far Advanced	Miliary	Pleural Only
5*	11+	7	1	2

* One with pericardial and left pleural effusion
One with ascites and bilateral pleural effusion
One with mediastinal abscess

\+ Two with pleural effusion
One with laryngeal disease

Extra-Pulmonary

One with right knee only

*From the Pulmonary Section, Veterans Administration Hospital, Lexington, and the Department of Medicine, University of Kentucky Medical Center, Lexington
Paper received at KMA: 1-7-75

TABLE II

DIAGNOSIS

Smear positive, culture negative	3
Smear positive, culture positive	9†
Smear negative, culture positive	5*
Suspicious X-Ray, PPD+	2
Sputum culture positive, pleural fluid negative	1
Sputum culture positive, pleural fluid and biopsy positive	1
Sputum culture negative, pleural biopsy positive	1
Sputum culture negative, pleural and peritoneal fluid positive	1
Sputum culture positive, pleural fluid positive, pericardial not done	1
Sputum culture negative, pleural fluid and biopsy negative, PPD 15 mm	1
Lung biopsy; positive by stain and culture	2‡
Synovial biopsy (culture positive)	1
	27

† Also one positive mediastinal biopsy
* One with positive laryngeal biopsy
‡ One positive sputum smear and culture

lack of consideration of tuberculosis in the differential diagnosis, and thus a failure to initiate a repeat sputum smear examination (Table 3). The latter are performed by the Ziehl-Neelsen stain in the house staff laboratory, and by the fluorochrome-rhodamine-auramine method in the main laboratory.[4] This is an improvement over the Ziehl-Neelsen stain, but may give rise to an occasional false positive result.

Discussion

Cases of active tuberculosis may be admitted to special units in a general hospital and, in addition, it is now recommended that patients with tuberculosis should have treatment initiated in a general hospital, and be considered for

TABLE III

DELAY IN DIAGNOSIS (18)
Two Days to Five Weeks

1. Inadequate suspicion of tuberculosis
2. PPD skin test not performed, or not read at 72 hours
3. No AFB 'smears' done on ward, and delay in forwarding samples to main laboratory
4. Failure to repeat sputum smears if negative, and infiltrate suspicious
5. Delaying 'diagnosis' until return of sputum or tissue culture (4-6 weeks)

early discharge home. At all events, it is important now for general physicians to consider such a diagnosis in a variety of chest infiltrates, and to remember that tuberculosis may still involve extra-pulmonary sites. Since case-to-case transmission is by the aerial route, undiagnosed pulmonary cases pose a hazard to other patients and to staff. Of these 27 cases, 17 had pulmonary involvement, and 12 of these had a positive sputum smear. It was clear that a number of cases could have been diagnosed earlier, and thus treatment initiated to the advantage of everyone.

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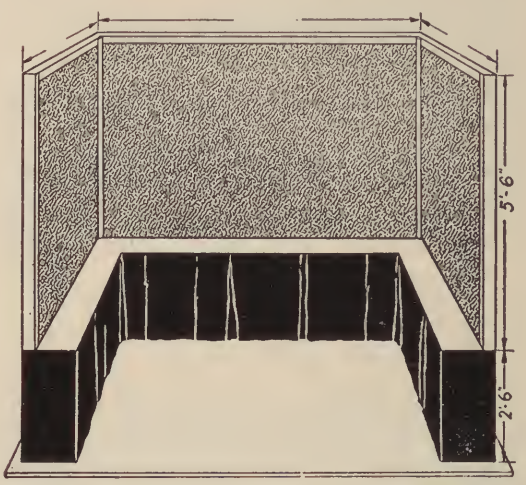
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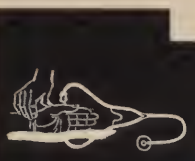
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MEDICAL PROGRESS



Hyperglycemic Nonketotic Coma

James W. Anderson, M.D.*

SYRUPY blood results from a glucose content above 1,000 mg% and is associated with an ominous prognosis; over half of the elderly patients with this diabetic complication die.[1] The nonketotic patient with severe hyperglycemia is more likely to be elderly, to be severely dehydrated and to have other serious complications than is the ketoacidotic patient.[2] Because the hyperglycemic nonketotic state develops slowly and dramatic signs such as Kussmaul's respirations are generally absent, early recognition is difficult and delays in starting treatment may contribute to the high mortality rate.

An inadequate supply of insulin can lead to a variety of disorders ranging from mild postprandial hyperglycemia to severe hyperglycemia with or without ketosis. The "pure" hyperglycemic nonketotic state is at one end of the spectrum, the combination of hyperglycemia and ketoacidosis (accounting for over 75% of patients) ranges in the middle, and the "pure" ketoacidosis with mild hyperglycemia is at the other extreme.[3,4] Since hyperglycemic nonketotic patients (accounting for 15-20% of cases) do differ in their mortality, fluid requirements and insulin requirements, this paper will outline the recognition and treatment of these patients.

Pathophysiology

Dehydration. When the plasma glucose concentration chronically remains above the renal threshold, the persistent glycosuria induces an osmotic diuresis with greater losses of water than electrolytes; however, sodium and potassium depletion also occurs. These losses may occur slowly over a period of weeks or months, and as long as the patient is able to drink enough fluids to replace the urinary losses, the blood glucose concentration generally does not rise above 500 mg%. When the patient decreases the intake of fluids, prerenal azotemia develops and the blood glucose values may rise rapidly.[4] Although these events may unfold over a two-year period, they may be telescoped into a few days by certain drugs or illnesses. Severe dehydration has developed in most patients by the time they are admitted to the hospital and nearly half of the deaths which occur result from rapidly progressive shock. The intracellular dehydration of the brain produces neurological abnormalities and hemoconcentration sets the stage for arterial and venous thromboses.

Diminished Ketosis. The reasons that many of these patients do not have ketones in blood or urine are not known. Speculation has centered around these four factors: a. hyperglycemia, b. dehydration, c. inhibition of lipolysis and d. decreased hepatic ketone formation.[4] Since comparable degrees of hyperglycemia and dehydration are commonly seen in ketoacidotic patients, it seems unlikely that these factors (a and b) are important. Hyperglycemic nonketotic patients tend to have lower free fatty acid (FFA) values than do ketoacidotic patients suggesting that lower rates of lipolysis may contribute to a reduction in ketogenesis.[2] However, the most attractive (and plausible) hypothesis for diminished ketogenesis is that these patients have low levels of plasma insulin which are capable of turning off hepatic ketone formation.[2] This hypothesis suggests that ketoacidotic patients have virtually no circulating insulin and lipolysis and ketogenesis are wildly out of control. On the other hand, hyperglycemic nonketotic patients have low levels of insulin which

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may be adequate to reduce lipolysis and turn off hepatic ketogenesis; these insulin levels, however, are not adequate to prevent hyperglycemia.[4]

Precipitating Factors. Factors which inhibit insulin secretion (such as Dilantin and Diuril), accelerate dehydration (such as severe burns) or abnormally raise the blood glucose concentration (such as hyperalimentation) may percipitate the hyperglycemic nonketotic state. Drugs which may contribute to this condition are diphenylhydantoin, the thiazide diuretics, glucocorticoids with or without immunosuppressive agents, propranolol and diazoxide. Therapeutic measures which may precipitate severe hyperglycemia include pharmacological doses of glucose by tube feeding, intravenous hyperalimentation or concentrated infant formulas. Profound hypothermia, hemodialysis and peritoneal dialysis have contributed in some cases and pancreatitis, pneumonia, severe burns, heat stroke, and cerebral vascular accidents have occasionally been associated with this condition.[2-4]

Clinical Features

Stupor or coma in a middle-aged or elderly patient is a common presentation. A history of increased thirst and urination for many weeks or months and the gradual onset of weakness is often elicited. The patient is moderately to severely dehydrated, does not have Kussmaul's respirations and, in addition to drowsiness or coma, focal neurological seizures may be seen. In reviewing case reports of 39 patients considered to have the "pure" hyperglycemic nonketotic state, the average age was 58 years and one-third of the patients were over 65 years old. However, this condition may develop in children and in insulin-requiring diabetics.[4] The average blood glucose concentration was 1220 mg% with the highest value being 4800 mg%. Some of these patients had small amounts of ketones in the urine and trace amounts in the blood, but the presence of a strong reaction for ketones in the blood indicates the presence of ketoacidosis. During initial evaluation the serum sodium concentration may be low, normal or high. Values in these 39 patients ranged from 123 to 174 mEq/1 with 18 patients having elevated values and 6 having low values. Hyponatremia appears to be an early event in the evolution of this condition and occurs when hyperglycemia draws water from the cells into the plasma in an attempt to maintain a normal serum osmolality. As the ability of the body to maintain a normal plasma volume diminishes, hypernatremia develops. Thus those patients with the most severe dehydration are those who have hypernatremia.

Differential Diagnosis

In approaching the comatose diabetic, the principal differential is between a. hypoglycemic coma, b. diabetic ketoacidosis, c. the hyperglycemic nonketotic state, d. lactic acidosis, e. uremia, f. a cerebral vascular accident, and g. an overdose of drugs. If there is no glucose in the urine, blood should be drawn for a glucose determination and 25 g of glucose should be given intravenously immediately to treat suspected hypoglycemia. The presence of Kussmaul's respirations indicates a metabolic acidosis such as ketoacidosis, lactic acidosis, uremia or drug ingestion. A history and brief neurological examination will generally identify a patient with a cerebral vascular accident. In most instances one will be distinguishing between ketoacidosis, lactic acidosis and the hyperglycemic nonketotic state. The presence of heavy glycosuria (coupled with a blood glucose value about 750 mg%) and minimal or absent ketonuria and ketonemia establishes a diagnosis of the hyperglycemic nonketotic state. Heavy glycosuria coupled with a strong reaction for ketones in the blood points to diabetic ketoacidosis. Lactic acidosis may be superimposed on either ketoacidosis or the nonketotic state but should be suspected as the primary event in the presence of prominent Kussmaul's respirations with minimal glycosuria or ketonemia.[3]

Treatment

General Measures. All cases of diabetic coma are emergencies.[5] Glucose and ketones are measured in the blood and urine the moment the diagnosis is suspected. Intravenous fluids should be started immediately and as soon as severe hyperglycemia is confirmed insulin should be given. All insulin doses, intravenous fluid, blood and urinary findings, vital signs and the mental status should be recorded on a diabetic coma sheet. An electrocardiogram is obtained within an hour to assess potassium balance and myocardial function.

Glucose and ketones should be measured in the urine every 30 minutes. Blood should be taken for glucose, sodium, potassium, BUN and hematocrit measurements every two hours until the patient is stable.

Fluids. Most patients should receive 1,000-1,500 ml of half-normal (0.45%) saline in the first hour. This replacement fluid is given because it provides more water than electrolytes, which is consistent with the deficits of the patient.[4] However, if the patient is hypotensive, normal (0.9%) saline should be infused until the blood pressure is stable and the urine flow is adequate; vigorous restoration of the blood volume is essential for survival of these patients.[6] Since many patients require from 4 to 8 liters of intravenous fluids during the first 12 hours, their cardiovascular status must be followed carefully. The central venous pressure should be monitored in those patients with preexisting heart disease or renal failure. Intravenous potassium (20 mEq/1) usually should be started with the second liter of fluid. Glucose (5%) should be substituted for the saline infusion when the blood glucose value reaches 300 mg% or the urine glucose changes to 3+.

Insulin. Both ketoacidosis and the hyperglycemic nonketotic state can be managed satisfactorily with small doses of insulin if meticulous attention is paid to fluid and electrolyte balance and the patient's condition.[7] The patient with a blood glucose above 750 mg%, a plasma CO_2 of 20 mEq/1 or higher, and only trace amounts of ketones in the blood should receive an initial dose of 25 units of regular insulin intravenously and 25 units subcutaneously. Blood should be drawn at 90 minutes after the initial dose and insulin should be given at 2 hours after the initial injection unless the blood glucose has fallen to less than half of the initial value. If the blood glucose at two hours after the first insulin injection has fallen less than 100 mg%, then the initial dose (50 units) should be repeated. If the blood glucose has fallen approximately 200 mg% or greater, then a dose of 10-25 units should be given subcutaneously. Insulin should be given every two hours according to this schedule until the blood glucose concentration reaches 300 mg%.

Complications. In addition to infection and hypotension which may be presenting features, one should carefully observe the patient for overhydration. Cerebral edema has been reported in a few patients.[8] This generally occurs 24-48 hours after hospitalization when the patient has improved clinically. Thus if the mental status of the patient deteriorates when the metabolic condition is improving, one should do a lumbar puncture immediately and institute vigorous therapy for impending cerebral edema.

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Pro-Banthine®
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propantheline bromide

Indications: Pro-Banthine is effective as adjunctive therapy in the treatment of peptic ulcer. Dosage must be adjusted to the individual.

Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflux esophagitis, or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution. Fever and possibly heat stroke may occur due to anhidrosis.

Overdosage may cause a curare-like action, with loss of voluntary muscle control. For such patients prompt and continuing artificial respiration should be applied until the drug effect has been exhausted. Diarrhea in an ileostomy patient may indicate obstruction, and this possibility should be considered before administering Pro-Banthine.

Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

How Supplied: Pro-Banthine is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg.

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"Analgesic" action—Pro-Banthine helps to control the acid-spasm-pain complex.

Vigorous anticholinergic action—Pro-Banthine® Vials, 30 mg., are for intramuscular or intravenous use when prompt and vigorous anticholinergic action is required.

Mild anticholinergic action—Pro-Banthine® Half Strength, 7.5 mg. tablets, for more exact adjustment of maintenance dosage in mild to moderate gastrointestinal disorders.

Pro-Banthine®
(propantheline bromide)

a good option in peptic ulcer

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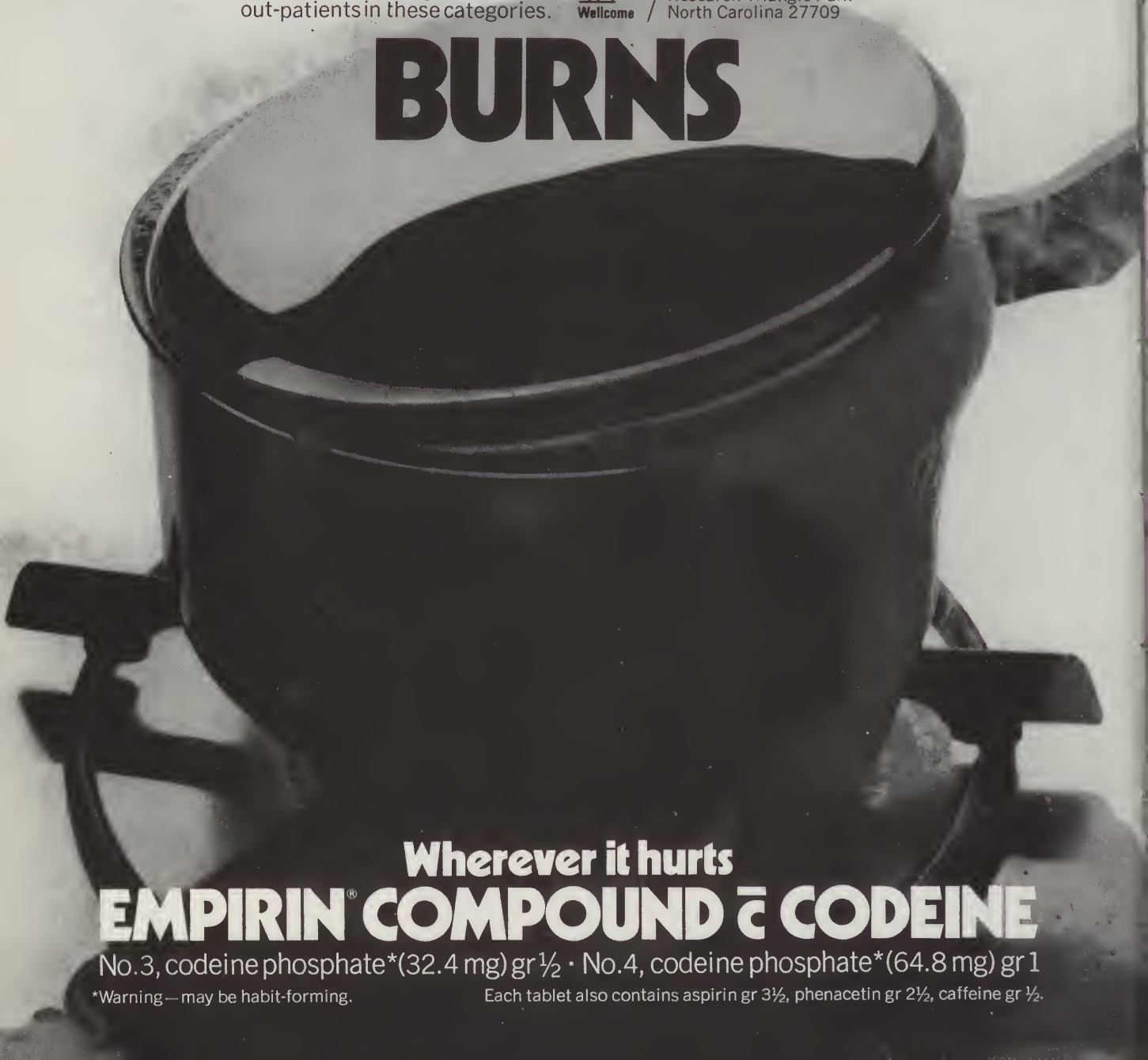
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Each tablet also contains aspirin gr 3½, phenacetin gr 2½, caffeine gr ½.

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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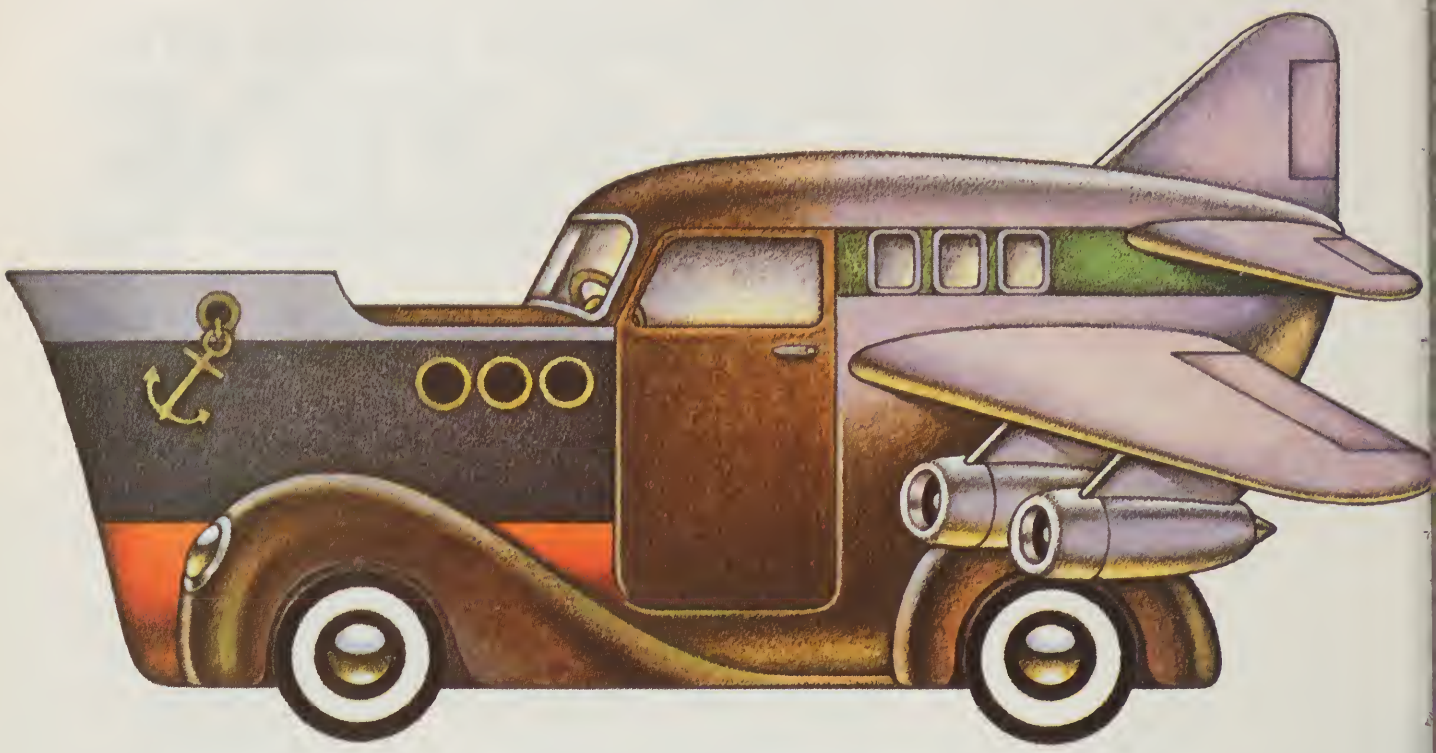
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Neither inconvenient potassium supplements nor special K^+ rich diets needed as a rule. Just 'Dyazide' once or twice daily for maintenance.



Two prime reasons patients drop out of hypertensive therapy are (1) the patient failed to understand directions, and (2) the regimen was overly complicated. Dosage is simple with 'Dyazide', easily understood, once or twice daily, depending on response. There's no need to complicate the regimen with potassium supplements or unwieldy potassium-rich diets.

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Up to 24 hours of effective control with a single dose...in nausea, vomiting and dizziness associated with motion sickness.

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CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

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Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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Antivert®/25 Chewable Tablets
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for motion sickness

SPECIAL ARTICLES

Licensure, Education and Disease Control

Arthur H. Keeney, M.D.*

THE ultimate goals of medical scholarship and the separate procedure of licensure to practice are reduction of morbidity and mortality. Expressed otherwise, the evidence for evaluation of medical education, research, service, and administration must be more vigorous and full of life, with statistical reductions in disease. Fundamentals attained within the conventional four years of medical education should equip the tyro physician with an understanding of his tools. Graduates of the 1970's have more factual materials and more effective armamentaria than earlier graduates, including those of even just a few years gone by. It is still accurate at this time to apply the words of Sir William Osler who said, "The worst of today's graduates can render better medical services than the best graduate of fifty years ago". In this decade we have fenced with the name applied to the first year of post-graduate medical education, but it is still the valuable bath of fire in which the young physician—at times called the intern—must accept initial responsibilities for patient management including life and death crisis. This is a singularly valuable shifting of gears. It is, however, a limited component in a commitment to scholarship which the physician must make throughout his career.

As this nation, nearly two centuries ago, separated church and state, our predecessors in medical education early in this century separated schools and licensure. Independence, objectivity, and avoidance of conflicting interest required this separation to be maintained. Licensing agencies assess at one given time subsequent to graduation the theoretical and practical competence of the new physician to deal rationally with medical problems. Up to now, reissuance of licenses has maintained an inventory of physicians and verification of their locations. Physicians of the Kentucky Medical Association through their elected House of Delegates have thoughtfully and after several years of study requested that reissuance of Kentucky licenses be accompanied by report of continued scholarship. The AMA Physician's Recognition Award is a prototype procedure and gives the graduate physician considerable latitude in choosing his avenues of further instruction. These are steps toward documenting the continuation of scholarship. For any given physician the efforts may be in a field specifically attractive to him, or perhaps in a field applicable to problems manifested by numbers of his patients. Reliable incidence data on many diseases are unavailable. Overall longevity has steadily increased in this century just as average height has mounted. Insurance data indicates distinctly decreased mortality in our nation last year. Still, "the best medicine is never good enough" and we face diseases which we cannot control and deaths which we cannot forestall. The unexciting labor of epidemiology and biostatistics must ultimately validate the success of continuing medical education. The reoriented practitioner of family medicine is coming forward in several parts of the nation as the *practitioner recorder* of vital public health data. Though today we cannot accurately tally the numbers of blind or diabetic citizens in any state, we are enroute to a hopefully clearer grasp of these measures which will finally indicate success of our efforts.

In the meantime, new formalities obligate us to document efforts at ongoing education but allow for broad latitude among perceived areas of need. The reissuance of a Kentucky medical license is not a re-examination of competence

*Dean, University of Louisville School of Medicine.

but will soon attest to a persistent level of academic pursuit. Most of the strengthening in American medical education has come by extra-legal and self-imposed procedures. Such initiative manifested again by the members of the Kentucky Medical Association must continually reach for strengthening and specificity. False measures or pacifying myths, however, must be replaced by careful intelligence of our real enemy—disease and death.

PURDUE
DEFIBRILLATION CONFERENCE

The Biomedical Engineering Center of Purdue University will hold a conference in Lafayette, Indiana from October 1 to 3, 1975 covering the practical and clinical aspects of cardiac defibrillation. The speakers have been selected based upon their positions as leaders in their respective fields. The topics to be discussed include clinical, basic science, and engineering aspects of electrical defibrillation as it pertains to the needs of physicians, nurses, emergency medical personnel, hospital engineers, equipment manufacturers, and research scientists. The state-of-the art of defibrillation techniques will be presented and examined critically and a major goal of this three-day conference will be to integrate all available technology for optimization of ventricular defibrillation. The registration fee of $95 includes proceedings and two luncheons.

For further information, please contact:
Write: Division of Conferences and Continuation Services
Stewart Center,
Purdue University
West Lafayette, Ind. 47907
Phone: Area Code (317) 749-2533

Medical Education: What does it do to a student?†

C. Elliott Ray*

I have often heard several of my compatriots metaphorize medical school as four years in the knee-chest position. I don't view it as quite that traumatic, but it certainly is a completely unique experience and vastly more demanding, both physically and mentally, and not referring to knowledge but to emotional, psychiatric, and moral well-being, than any other educational experience.

The very selection process is unique. The biggest hurdle to the M.D. degree is acceptance to medical school. This year, right now, almost 40,000 people are interviewing, filling triplicate forms, soliciting letters of recommendations from college professors, clergymen, employers, mothers, and sweethearts for the 14,000 freshmen positions for 1975 admission. After admission, 98% of these people graduate as M.D.'s; in other words, you've made it, if you're willing to work hard, by virtue of being accepted.

But who do we select? We select the person who is a master of chemistry, physics, and calculus, the person with the **scientific** mind. We don't select the person specifically interested in treating colds, backaches, the "housewife blues", but we select someone who can get through the basic sciences. MCAT does a great job of predicting who will survive several years of basic science, but we leave it to an admissions committee whose composition and process is as different as the 114 medical schools to decide what 3.5 grade point average student with 600% MCAT scores will be a good physician. We do not select physicians; we select scientific minds and hope to mold a 20-year-old system of neurons into a physician, a modality that we still cannot identify. How can you produce a product you can't define?

There are some changes on the horizon to help alleviate this problem of who will and who will not be a good physician, who will go into Family Practice, Surgery, etc. Beginning this fall, the MCAT will have new sections to try and determine the noncognitive functions of a physician. This is the end result of several years of research by Doctor James Angel and his staff at the Association of American Medical Colleges. Unfortunately this type of study will take a decade to evaluate. The current selection will continue status quo.

What happens after being selected? You go to the mecca of higher learning, the Medical Center, where you shall acquire . . . omnipotence. I still remember quite vividly my first day of medical school: my first 4-hour morning of lecture and lecture notes, eating lunch with my peers who seemed to be the most diverse group of weirdos I had ever met, returning for a few more hours of lecturer and lecturee, going home to my wife and relating this wonderful experience, but succinctly, because I had to go memorize that 7-hour stretch and prepare for the next day's marathon. After a few months of that, I looked around and said to myself, "What the hell does this have to do with treating patients?!"

I'm tired; my world consists of voluminous books with words I can't even pronounce, bits of a prosected body that leave an eternal smell on my lunch. I have a backache from looking through a microscope all day and half of the night; my contact with the rest of the world consists of stolen moments with Walter Cronkite, and I am a celibate because my wife vomits whenever I get close enough to give her a good whiff of enbalming fluid still on me from gross lab. The only thing that keeps you going those two years of continuous, didactic teaching are the occasional glimpses of a patient presented before the congregation and the hope that, in two years, if you eat all your porridge like a good boy, you will begin playing with the real thing, a patient.

All of this is very satirical, but it does illustrate this point: numerous studies and books show that entering medical students have one of the highest indices for social concern and humanitarianism, but in two years we strip him of his identity save "the Center", restructure his thought processes so that he does not have free thought but only regurgitation of lectures and books, and give him the highest index of cynicism of any other group of people. Little of the pre-med school level of humanitarianism is ever reachieved, but the end of the second year is the lowest point.

Once we have formed this scientific, regurgitant, cynical mind, we crown him ready to begin caring for patients. We send him into the clinics and wards, to work side by side with every type of specialist known, show him two years on intense hospital-based care, the renal transplants, the high-risk nursery, the acute and chronic illnesses that require twenty-four hour care by a doctor. But the actual part of patient care a student gives is all too often just the scut of patient care: the drawing of blood, running EKG's, transporting patients to X-ray, going to the clinical lab to get the numbers because the lab is too inefficient to get the values back in less than 8 hours and often not until the next day. The teaching is all too often from interns and residents, or more didactic lectures from attendings. You are also expected to continue reading texts and journals on your own time.

When it's all over, at the end of two clinical years, when all my peers start scrambling to go into super-specialties, to be surgeons, to be academicians, our educators look around incredulously and ask, "Why aren't you going into primary care in rural America?" Our educators ask why in 1965 we had 71,366 general and family practitioners and only

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†*Given at the Continuing Medical Education Conference, Cave City.*

**President, University of Kentucky SAMA Chapter, who was recently cited as the outstanding chapter president in the nation.*

53,348 in 1972, while **every other field** of medicine saw an increase in their ranks. Why? Because I, a student just four months from becoming an M.D., have absolutely no idea what it is like to be what you are, a practicing physician. I have never even seen the inside of an office of a practicing physician, delivering primary care as you all do; I have never seen that as a part of my education and I won't in my residency years. But I have to decide now, in fact two months ago, into what field of postdoctorate training I will go.

The only options I have are the specialties or the academic, because I have at least seen those. I am not brave enough to reach for the unknown as a lifelong venture. Those that do venture from the medical center do so as an active pursuit **away** from super-specialists and their environment. It is not hard to see why, in just a few years, these practicing physicians develop a strong anti-medical center attitude and an even stronger anti-formal education attitude. They are sick and tired of tests, academicians, and the med center, and want "just" to take care of patients.

Let's move on to postdoctorate training, to a setting of even more specialty. Rotating internships no longer exist, a position that was a modus operandi just a few decades ago, a position most of you here today held as the last phase of your training. But I and my peers must declare ourselves to somebody's department and therefore their specialty. I will then as a rule see one of three sectors; the indigent population, referrals to a tertiary center, and the special cases requiring a super-specialist. I will be asked to work ridiculously long hours, arduous on-call schedules, and for low pay.

Granted, these conditions are presently benign compared to the system many of you experience, but it is still an almost subhuman existence, rather like a period of voluntary slavery. One does learn a lot during this period, but what is the price? How much more callous do you become when you are awakened for the fourth time at 3 a.m. to see a minor problem in the ER? How much further is the denigrated status of the LMD impregnated in your mind due to missed diagnosis or referred complications that "would not happen here at the center"? (i.e., you see the LMD's mistakes but not his successes.) And then after a total of 1-7 more years of postdoctorate training, we are ready to let another trainee begin private practice in his chosen specialty. But what was the personal toll to this point? How many divorces, how many alcoholics, how many suicides, how many doctors go on to work themselves to death? These are rhetorical questions, but this one is not. What about continuing education?

Medicine is an ever-changing art. The skills, the drugs, the very mode of education that I have and will receive compared to those of twenty years ago are as different as night and day. We must continue to educate ourselves in a formal manner, and I am proud to say the KMA has endorsed the practice of continuing education as a condition for relicensure. That single act in my opinion is the most important policy the KMA, as Organized Medicine, should have.

Despite all the negativisms and the ills of Medical Education I have enumerated, our educational process does produce the best-trained person in the world, a medical doctor. We are the top one half of one percent of the most educated. With that goes a lot of responsibility, not just the health and well-being of our patients, but the assurance for our patients that we maintain our razor-sharp training edge, that we keep abreast of the changes and advances, that we anticipate their needs, such as more primary care physicians. To do this, we must continue to demand the excellent minds, define what does make a good physician, and select them for medical school.

What can we accomplish today? You as organized medicine must help tear down the concept of the LMD perpetrated by the very structure of medical education. You must assure the continued competence and excellence of your members. You must open your doors and demand to take me as a student and as a resident into your practice, and the medical center must put me into the rest of the medical world. It is an experience from which we can both benefit, and one that will benefit the public which we profess to serve. We must redesign our educational process so that we embellish the humanitarianism in us and not suppress it. We must expand our education to re-encompass the end product, the practicing physician, the person providing a service to all the public and not just the top of a tertiary structure. We must have Organized Medicine more involved in the continuum of Medical Education throughout our career as Kentucky has begun to do.

And we must have students in more than a passive role. We must have students help guide and direct medical education. I am the one with the expertise on being a medical student, so I am a source that must be tapped. Medical students must be brought into involvement with Organized Medicine, just as you have today. I don't have all the answers and neither does anyone else, but if we all work together, if we all tap each other's resources, then we can form a more nearly-perfect educational system, a more nearly-perfect physician, and a more nearly-perfect system of health care.

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FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

Britain's cradle-to-grave National Health Service is trying to resolve the gravest crisis of its 26-year history—a showdown over pay and working conditions of doctors and technicians . . . .

The ferment inside the NHS had this unexpected effect: Some 2.5 million of the country's 55 million people took out private insurance with organizations that provide their own medical services. One of them, the American Medical International Organization, now has a 19-million-dollar hospital-construction program under way in Britain—the nation that once thought it had the world's best public medical-care system.

—*U.S. News & World Report, March 3, 1975*

It's the lawyers; it's us; it's the way society has changed; it's everyone trying to make the almighty dollar. A malpractice lawyer is no different. He wants to earn a living, and we shouldn't condemn him for doing what has to be done, but the law allows that adversary kind of tactic to go on.

New York City, of course, is a special case. You go upstate to a small community, and everybody depends on the doctor. You don't go up and kick the banker—someday you might need a loan. That's common sense. The same is true with a physician. You don't kick him—you may need him someday. In a smaller town you're less likely to bring suit. Everybody says: "What's the matter, John? The doctor's a nice guy." In New York City there's no rapport of that kind. That's society's thing, not just the doctor's and not just the consumer's. We ran a ten-year survey of patients who came to Columbia-Presbyterian Medical Center with injuries. We found that 83% of the people who came and were injured eventually took legal action against somebody. In my part of the country—Ohio—if you walked down the street and tripped, people would consider you a damn fool and wonder why you didn't watch where you were going. In New York, while a mother is getting the injuries from her fall x-rayed her son is out photographing the hole in the sidewalk. They know that might mean a certain amount of money.

DAVID L. ANDREWS, M.D.

—*Medical World News, February 24, 1975*

Many patients who are to have surgical procedures are given IPPB treatments before and afterward, with the theoretical aim of preventing postoperative pulmonary atelectasis. However, the incidence of postoperative pneumonia or atelectasis was not altered by IPPB in cases of routine abdominal or thoracic operations. It is likely that deliberate voluntary expansion of the lungs is of a value similar to IPPB in the prevention of postoperative problems.

ALVAN L. BARACH, M.D.
MAURICE S. SEGAL, M.D.

—from *JAMA*, March 17, 1975

Of course, there has always been ample opportunity to learn about proper use of drugs. The books and journals were always there. But somehow the traditional demeaning of therapy left its mark. How many lectures or grand rounds have devoted 50 minutes to the excitement of the diagnostic chase only to peter out on the downbeat—the classic denouement—"Once the diagnosis was made—the appropriate therapy was employed." So we graduated several generations of diagnostic virtuosos and therapeutic clods.

ROBERT H. MOSER, M.D.

—from *JAMA*, March 17, 1975

EDITORIALS

Relicensure

ON September 24, 1974, the KMA House of Delegates adopted the resolution that the Kentucky Board of Medical Licensure be requested to require (by regulation) satisfactory participation in continuing education for re-registration of the license to practice medicine.

The distinguished Dean of the University of Louisville School of Medicine, Doctor Arthur Keeney, publishes a special article on re-registration and continuing medical education in this issue. This requirement will have to be met at three year intervals, the first of which will start July 1, 1975. There was spirited debate against the resolution as well as enthusiastic and inspired support of it. Indeed, it is unlikely that many physicians are without a strong opinion on the question, and many may be dismayed when they first learn of the implementation of this requirement. The resolution specifies that examination for relicensure is **not** endorsed.

However, in the future it is highly probable that additional requirements for relicensure will emerge. Kentucky's physicians should be alert to this and should be contemplating the best alternatives. At present, there are two methods of assessing physician competence:

1) Evaluation of his knowledge by examination.
2) Evaluation of his actual care of patients through peer review, by circumscribed medical audits.

Arguments against the use of examination favor Medical Audit. The fundamental issue is the actual quality of patient care. It is very uncertain that examination of a physician's knowledge will reflect his competence in practice because knowledge is only one component of competence. There is now considerable evidence that many of the deficiencies in patient management are **not** the result of insufficient knowledge, as already demonstrated in peer review activities. It is probable that the premature adoption of examination as the prime requirement for relicensure might stifle the development of a more reasonable and accurate assessment of competence by reasonable methods of Medical Audit through peer review.

The obvious, real advantage of examination, which tests recall of knowledge, is that this method is already available, refined and extremely practical to administer. The disadvantage of medical audit is that the technique is yet to be refined and its application will certainly be slower, more costly and more administrative. But peer review examines cognitive skills, interpersonal relationships, efficiency, adequacy of ancillary facilities and judgement as well as recall of knowledge.

It is not likely, in a real and practical sense, that proof of a certain number of hours of continuing education is going to make any impact on the consumer's (government's) desire for certification of the physician's competence. But the consumer (government) will continue to press for such tangible assurance of every physician's competence until he can recognize the difference between Doctor E and Doctor O as easily as he can see the difference between a Ford and a Chrysler. Whether this is right or wrong, every Kentucky physician must attend the question and try to select the appropriate answer.

AEO

"Overtrained?"

"I'm overtrained for what I'm doing!" The speaker was rubbing his forehead in fatigue and exasperation after a long day of looking at sore throats and sore joints, tension headaches, coughs, burnings on urination and anxiety. He looks for things more stimulating but seldom finds any. He knows resuscitation but rarely sees someone who needs it. He has a special interest in M.G., but hasn't picked up a new case in a year.

At middle age he finds himself with a large and demanding practice, a comfortable—not lavish—income made constantly less by higher overhead. He tries to be available to patients and also to his family. He spends about 60 hours at work every week, not counting the telephone hours. He goes to meetings, is quite a bit ahead on credit-hours, teaches some, fends off insurers, lawyers and planners, doesn't play much golf.

On his desk land a thousand pages per week of printed material that someone, apparently, expects him to absorb and he guiltily takes a bundle home "to read tonight". But the stacks get taller till his wife cries "Enough!" and he gloomily discards some, feeling forever deprived of the pearls they may have contained. He is what someone has decided to call a Primary Care Physician. I call him "a Good Doctor." Overtrained? Happily, he is, for in this overtraining lies the very best of Medicine.

Our lives are harassed by the results of undertraining. Some of those who repair our machines, some of our bureaucrats and functionaries and politicians, show decided tendencies toward undertraining and a curious disinterest in their ineptitude.

On the other hand, it is a pleasure to watch people who are well-trained. The nurses in the C.C.U., a fine carpenter, a good airline stewardess, adroit technicians—those who know their techniques, their crafts, and do them well. They are the ones who are called on daily to use most of their know-how during their shift. They save lives, operate great machines and great institutions, help keep us going despite the entropic tendencies of a great society.

The overtrained is the true professional. In medicine this overtraining sets the physician apart from the growing horde of "health professionals" (sic) who are using every bit of their knowledge (we say charitably) every time they function.

Even the writer could probably learn to fly a plane. But I cannot possibly commit the thousands of hours required to become a professional airline pilot, to overtrain to meet that special situation which will require all of that training in an instant of terrible risk. Someone must sit in the cockpit and fly and we want it to be the overtrained pilot, not the merely trained stewardess, despite her attractive competence in other areas.

Not all M.D.'s are still physicians. Some have gradually denied this professional birthright in concentrating on a nucleus or an ossicle or a desk. There are surgeons who can replace aortic valves, but can't diagnose a broken heart. They have regressed to being technicians. There are psychiatrists who can't hear a murmur. They have become only oversized social workers, beautifully, narrowly trained—but not over-trained. Keeping current is a formidable task.

The physician knows a great deal more than he uses every day. He constantly seeks knowledge and experience, techniques and insights into the human condition. Until all sore throats are caused by the same agent, all fractures heal on schedule, all depressions respond to an insight, all chest pains have the same etiology, I want physicians to be overtrained.

David L. Stewart, M.D.
Editor, Jefferson County Medical Bulletin

Reprinted from The Jefferson County Medical Bulletin

GRAND ROUNDS

The University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

The Syndrome of Malignant Hypertension

THIS was the third University of Kentucky Medical Center admission for Mr. C., a 55-year-old Caucasian from McKee, Kentucky. He was admitted on December 14, 1974, via the Emergency Room, with severe hypertension.

History: The patient was initally seen at University of Kentucky Medical Center in February, 1974, with a well-documented three-year history of hypertension. Diastolic blood pressures at that time were in the range of 140-150 mmHg. Evaluation included a normal rapid sequence IVP, a renal scan showing poor function, 2+ proteinuria, and a creatinine clearance of 41 ml/min. Compromised renal function was attributed to nephrosclerosis. In the hospital, blood pressure was easily controlled with sodium restriction, thiazide diuretics, and methyldopa. On subsequent clinic visits, however, his blood pressure was poorly controlled and for this reason he was readmitted in April. Compliance to his medical regimen had been poor, and his blood pressure was again easily controlled in the hospital. His last clinic visit was six months prior to the present admission, and at that time his blood pressure was 212/124 mmHg. His drug regimen included furosemide, hydralazine, propranolol, and methyldopa. On the evening of the present admission, the patient was brought to the Emergency Room by his sister, who reported a three to four day history of confusion and inappropriate behavior and a 12-hour history of slurred speech. The patient's only complaint at the time of admission was increased shortness of breath. He denied chest pain, orthopnea, PND, and edema.

From the Department of Medicine, University of Kentucky School of Medicine, Lexington

Physical Examination: The patient was a well-developed, but not overweight, white male who was oriented to person only and who had marked slurring of his speech. Supine blood pressure in both arms was 270/170 mmHg. Pulse was 96/min and regular, and he was afebrile. Funduscopic examination showed diffuse arteriolar spasm without hemorrhages, exudates, or papilledema. There were no carotid bruits, and neck veins were not distended. The lungs were clear to percussion and auscultation. The left border of cardiac dullness and the PMI were in the sixth intercostal space at the anterior axillary line. An apical S_4 gallop was present, and there were no murmurs. There were no abdominal bruits or palpable organomegaly. No peripheral edema was noted. There were no localizing neurologic signs. Deep tendon reflexes were active and symmetrical. The remainder of the physical examination was within normal limits.

Admission Laboratory Data: White blood count, 12,100 cells/mm^3; Hgb, 14.9 gm%; Hct 43%; BUN, 49 mg%; serum creatinine, 3.2 mg%; creatinine clearance, 50 ml/min; serum Na+ 140 mEq/L; serum K+, 4.2 mEq/L; EKG, left ventricular hypertrophy, old inferior myocardial infarction; chest x-ray, cardiomegaly.

Hospital Course: Initially, in the Emergency Room, the patient was given diazoxide and furosemide intravenously, and hydralazine intramuscularly. Because of a rising blood pressure after an initial drop to 190/120 mmHg, diazoxide was repeated two hours later with a good result initially. In addition, he was given methyldopa and propranolol, intravenously. Twelve hours after admission, he became hypotensive (blood pressure, 60/50 mmHg) and

developed a right hemiplegia. During the remainder of his hospitalization, his mental status improved, but his right-sided deficit remained unchanged. Blood pressure was controlled with methyldopa and furosemide. His hospital course was complicated by a right lower lobe pneumonia. Blood pressure at the time of discharge on December 26, 1974, was 130/80 mmHg.

Discussion

This patient represents at least two of the many problems relating to the diagnosis and therapy of malignant hypertension. First, it may be asked whether or not he actually had the syndrome of malignant hypertension. Secondly, was the development of the hemiplegia a consequence of severe hypertension or drug-induced hypotension?

Malignant hypertension is a clinical syndrome that may occur as a complication of any form of hypertensive disease. Histologically, it is characterized by necrotizing vasculitis, and clinically it is manifested by acute elevation of blood pressure, retinopathy, progressive renal insufficiency, central nervous system dysfunction, and, frequently, microangiopathic hemolytic anemia. With appropriate therapy of underlying hypertension, malignant hypertension can generally be prevented, and it is now estimated that this complication occurs in 1-2% of patients with essential hypertension. Black males with hypertension, particularly young black males, seem especially prone to develop malignant hypertension. Malignant hypertension is not only related to the height of the blood pressure, but also to the rate of rise of blood pressure.

For example, in our hypertension clinic we are following a 50-year-old, overweight, black woman with a long history of severe essential hypertension. Drug compliance had been a problem with this woman, and at one point her blood pressure was 300/170 mmHg. She was asymptomatic, no acute changes were observed in her fundi, she did not have proteinuria, and renal function was stable. We did not think that this woman had the syndrome of malignant hypertension. However, it is not unusual to see a patient, particularly a younger patient, with acute glomerulonephritis who has rapid onset of hypertension and who may have unquestionable hypertensive encephalopathy with diastolic blood pressure as low as 110-120 mmHg.

Recognizing the syndrome of malignant hypertension has important therapeutic implications. Untreated, 90% of patients with malignant hypertension will be dead within six months. Consequently, whatever the height of the blood pressure, if a diagnosis of malignant hypertension is made, the therapeutic approach will be considerably more aggressive.

Clinically, the recent appearance of symptoms may be associated with the development of malignant hypertension. Headaches, particularly occipital headaches, may be associated with accelerated hypertension. Other symptoms may include blurred vision, a sensation of dizziness, varying degrees of lethargy, confusion, seizures, and gastrointestinal symptoms including nausea, vomiting and occasionally abdominal pain. Conversely, patients with malignant hypertension may be asymptomatic. On physical examination, most abnormalities related to malignant hypertension are found in the fundi, examination of the cardiovascular system, and the neurologic examination. The spectrum of findings in the fundi include arteriolar spasm and retinal hemorrhages, exudates, and papilledema.

It may be possible to make a diagnosis of malignant hypertension without papilledema if other clinical manifestations exist. Generally however, papilledema is present although, in its absence, there is invariably evidence of intense arteriolar spasm, and most often hemorrhages and exudates. Examination frequently reveals a hyperactive precordium, cardiomegaly, both presystolic and protodiastolic gallop rhythms, and possibly other clinical evidence of congestive heart failure. Neurologic exam, including mental status, may be normal, or the patient may appear apprehensive, confused or stuporous. Focal neurologic signs may include nystagmus, visual disturbances, asymmetrical reflexes, positive Babinski's sign, and localized weakness. These signs may wax and wane. Laboratory findings may include: elevated sedimentation rate, laboratory evidence of microangiopathic hemolytic anemia, progressive proteinuria and deterioration of renal function, microscopic hematuria, and hypokalemia. EKG and chest x-ray may reveal evidence of left ventricular strain and congestive heart failure.

It may be difficult to distinguish this syndrome from other clinical conditions in hyper-

tensive patients, e.g., stroke, brain tumor, vasculitis, and uremia. In these settings, it is important to recognize that intense arteriolar spasm, observed on funduscopic examination, is one of the major clinical findings of malignant hypertension. Patients with stroke and brain tumor would not manifest other systemic findings associated with malignant hypertension. In patients with uremia or vasculitis, it may be possible to confirm a diagnosis of malignant hypertension only in retrospect. In these situations, a dramatic response to lowering blood pressure may establish the diagnosis of malignant hypertension.

The management of patients with malignant hypertension should include bed rest and a low sodium intake. These simple measures alone may have a profound effect on blood pressure. How rapidly and to what extent to lower blood pressure, are difficult clinical questions. A decision must involve balancing potential risks against the benefits of rapid blood pressure reduction, and obviously there are risks.

Before selecting a particular drug, it is important to determine if the patient has the syndrome of malignant hypertension or only extremely high blood pressure. If the patient does not have the clinical syndrome associated with necrotizing vasculitis, gradual blood pressure reduction by bed rest, low sodium diet, and oral medications may be safer than parenteral therapy. If the patient does have the syndrome of malignant hypertension, another distinction that should be made is to determine whether the syndrome has progressed to the point of encephalopathy. In the absence of encephalopathy, there may be more risk to rapidly lowering blood pressure than to a gradual blood pressure reduction over a number of hours or even longer. On the other hand if the clinical course is more fulminant, a more rapidly active agent, given intravenously, may be required.

Patients who are most prone to develop complications from rapid lowering of blood pressure are patients with renal disease, coronary artery disease, and cerebrovascular disease. In these patients, it is generally safe to rapidly lower blood pressure to at least 180/115 mmHg. In the absence of diffuse arteriosclerotic disease, there is considerably less risk to the rapid reduction blood pressure.

Autoregulation of cerebral blood flow is an important concept to keep in mind when thinking about how rapidly and to what extent to lower blood pressure. Cerebral blood flow normally autoregulates over a wide range of systemic arterial pressures, generally between mean arterial pressures of 60-160 mmHg (mean arterial pressure = diastolic blood pressure $+\frac{\text{systolic—diastolic blood pressure}}{3}$). With a sudden rise of arterial blood pressure, the capacity of the cerebral circulation to autoregulate may be exceeded, and the result is hypertensive encephalopathy. Patients with chronic hypertensive cerebrovascular disease have an elevated lower threshold for autoregulation. If blood pressure is lowered beyond that threshold, they are no longer capable of autoregulation. Patients who have cerebral infarctions have an even more restricted capacity to autoregulate; the lower threshold may be as high as a mean arterial pressure of 120 mmHg.

Vasodilators, (e.g., nitroprusside, diazoxide, and hydralazine) are useful in the treatment of malignant hypertension. Until recently, nitroprusside was used infrequently because we had to make up intravenous solutions ourselves. It is now prepared by the manufacturer, and for that reason we may be using it more frequently. Intravenous infusion of nitroprusside lowers blood pressure immediately, and blood pressure must be monitored frequently. For the relatively few patients who require the drug for longer than two or three days, serum thiocyanate concentrations should also be monitored, as the toxicity of nitroprusside is related to the accumulation of this metabolic product.

Diazoxide is structurally similar to the thiazides. Because of protein binding of the drug, to obtain a hypotensive effect, the intravenous infusion of diazoxide must be rapid, e.g., 10-20 seconds. If there is no response to the first infusion, patients can generally tolerate a second infusion within 30 minutes. Diazoxide is an easy drug to use. It lowers blood pressure within several minutes, and its effect may last for 8-12 hours, or longer.

Although hydralazine can also be used intravenously, we have generally used this agent intramuscularly, in situations where it seems reasonably safe to wait 30-60 minutes for a hypotensive effect. All of the vasodilators cause sodium retention, and in the acute management, a potent loop diuretic, such as furose-

mide, should generally be administered with these agents.

Another category of drugs are ganglionic-blocking agents, e.g., trimethaphan and pentolinium. These are extremely potent agents and are generally given as a continuous infusion. Blood pressure must be carefully titrated. Because the ganglionic-blocking drugs are more effective in the orthostatic position, supine patients generally require large doses. These agents also cause parasympathetic inhibition, including urinary retention.

Sympathetic-blocking agents (e.g., reserpine and methyldopa) in certain situations have a limited usefulness in the treatment of malignant hypertension. Both drugs cross the blood brain barrier and by themselves may cause varying degrees of lethargy. Consequently, in situations where it is important to monitor changes of a patient's sensorium, it may be advisable not to use reserpine and methyldopa. Additionally, because some patients are extremely sensitive to these drugs, the inital dose must be small, and since the maximal response may not occur for two or three hours, in the acute situation valuable time may be lost while waiting for a therapeutic response. Similar to the vasodilators, both the ganglionic and post-ganglionic adrenergic antagonists may cause sodium retention, and concomitant furosemide therapy is generally advisable.

An understanding of the pathophysiology of malignant hypertension has suggested several innovative therapies. Microangiopathic hemolytic anemia may be associated with malignant hypertension, possibly by one of two mechanisms: a) rise of blood pressure may cause fibrinoid necrosis and both malignant hypertension and fragmentation of red blood cells; b) a primary hypercoagulable state may be responsible for the malignant phase of hypertension. If this latter possibility were true, it might be anticipated that anticoagulation therapy with heparin would be an appropriate therapy for malignant hypertension. Experimental results with heparin therapy for malignant hypertension have been limited and inconsistent, and considering the potential hazards of heparin therapy in this setting, anticoagulation therapy cannot be recommended as a primary therapy for patients with malignant hypertension.

In patients with malignant hypertension, the activity of the renin-angiotensin system is generally increased. Renin is a proteolytic enzyme which cleaves a protein substrate to form a decapeptide, angiotensin I. In the circulation, angiotensin I is rapidly converted to an octapeptide, angiotensin II. Angiotensin II may cause hypertension both because it is a potent vasoconstrictor and also because it stimulates secretion of the mineralocorticoid, aldosterone, from the adrenal cortex. Experimental evidence suggests that angiotensin II may contribute to or actually cause malignant hypertension. Consequently one possible therapy for the treatment of malignant hypertension might be to inhibit the activity of the renin-angiotensin system.

This system may be inhibited by several mechanisms. One is to remove the renin-secreting organ, and urgent bilateral nephrectomy for the therapy of severe hypertension has been advocated. However, both renal function as well as fibrinoid changes and vasculitis within the kidney may be reversible over time with control of blood pressure. Indeed, significant improvement of renal function has been observed even among patients initially requiring dialysis therapy. In addition, blood pressure control can be achieved acutely with drug therapy, including drugs that inhibit the renin-angiotensin system. Consequently in our opinion, the case for bilateral nephrectomy in the acute therapy of malignant hypertension is not very compelling. However, an indication for bilateral nephrectomy is in the 10% of patients with chronic renal failure whose blood pressure cannot be controlled after an adequate trial of appropriate sodium deprivation and dialysis therapy. Renin secretion may be inhibited by beta-adrenergic blockade (propranolol), and the activity of the renin-angiotensin system may also be inhibited by the use of experimental agents that either inhibit converting enzyme activity, or alternatively with agents that compete with angiotensin II for peripheral binding sites. All three types of agents have been used successfully to treat patients with malignant hypertension.

Malignant hypertension may be viewed as a vicious cycle: severe hypertension results in renal ischemia; this in turn stimulates renin release and angiotensin II production; angiotensin causes further vasoconstriction and hypertension. This cycle may be interrupted at several points. Either angiotensin II production or its peripheral effect can be inhibited.

Another site for interrupting this cycle is simply to lower systemic arterial pressure. Indeed, many of the drugs frequently used to lower blood pressure (e.g., vasodilators, diuretics) are potent stimuli for renin release, and despite the potent stimulus for renin secretion, renin activity is decreased following antihypertensive therapy. Consequently, although angiotensin II may contribute to the hypertension of malignant hypertension, specific inhibition of angiotensin may not be required. A more rapid and more dramatic interruption of the cycle may perhaps be achieved by treating the hypertension with any agent that is required to lower blood pressure. However, in the relatively longer term management of patients with renin-dependent hypertension who appear refractory to drug therapy, blood pressure control may be achieved with agents that do specifically inhibit the activity of the renin-angiotensin system.

Conceptually and therapeutically, it is important to distinguish the syndrome of malignant hypertension from other acute hypertensive crises. Hypertension causing acute left ventricular failure is appropriately treated with agents that reduce the work of the left ventricle. Both ganglionic-blocking agents and nitroprusside decrease the work of the heart not only by decreasing after-load, but also by causing peripheral pooling of blood and consequently decreased venous return.

For patients with acute coronary insufficiency, reserpine and methyldopa may be useful agents. Both drugs have a sedative effect, and neither increases with work-load of the heart. Vasodilators increase work-load of the left ventricle and if they are used in patients with acute coronary insufficiency, it is preferable to use them in conjunction with an agent such as propranolol that blocks the reflex cardiac response to vasodilatation.

To treat hypertension associated with a dissecting aortic aneurysm, systolic blood pressure should be lowered to 100-120 mmHg. Again, because vasodilators increase cardiac output and consequently stress against the aorta, these agents should be avoided in this situation unless they are used in conjunction with a beta-adrenergic antagonist, such as propranolol to decrease myocardial contractility. Ganglionic-blocking agents, parenteral reserpine, methyldopa, and guanethidine may also be used to lower blood pressure in patients with aortic aneurysms.

In patients with an intracerebral bleed, there is some risk to rapid lowering of blood pressure because of spasm and decreased blood flow around the area of the bleed. However, the greater risk is in not lowering blood pressure sufficiently, and generally blood pressure should be lowered to even almost hypotensive levels. Patients with a thrombotic infarct may lose the capacity to autoregulate cerebral blood flow, and, as suggested previously in this situation, antihypertensive therapy should be less aggressive.

In summary, the patient described presents a difficult diagnostic problem. Consistent with the diagnosis of malignant hypertension is a three to four day history of confusion, slurred speech, and a blood pressure of 270/170 mmHg. However, funduscopic exam showed no hemorrhages, exudates, or papilledema, renal function had not recently deteriorated, and serum potassium concentration was 4.2 mEq/L. Because of an EKG diagnosis of a previous myocardial infarction and a history of nephrosclerosis, it is reasonable to assume that this man had arteriosclerotic cerebrovascular disease, and the possibility of a cerebrovascular accident before admission cannot be excluded. However, in this setting, with an impaired capacity to autoregulate cerebral blood flow, the extremely high systemic arterial pressure at the time of admission may conceivably have caused encephalopathy, even in the absence of several other features of the syndrome of malignant hypertension. Consequently, the initial therapeutic approach with diazoxide and furosemide was appropriate. Although the hemiplegia that developed in the hospital may have been a manifestation of severe hypertension, the timing of the onset of the right-sided weakness suggests that it may have been a consequence of a profound hypotensive response to drug therapy.

THEODORE A. KOTCHEN, M.D.
CHARLES S. BROOKS, M.D.

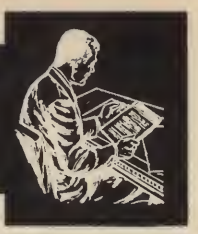
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(Continued on page 235)



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

CASE 20-71. This 24-year-old, married, white, Gravida 2, Para O, Abortus 1, was seen with this pregnancy by a private physician. Past medical history was significant in that she had been diabetic since age 12. Her first pregnancy was terminated at three months by a spontaneous abortion. She had been hospitalized in May, 1970, for tuberculosis and was treated with INH and PAS. Since receiving medications her sputums had been negative for acid-fast bacilli.

She was hospitalized several times with this pregnancy for edema. Her last menstrual period was March, 1971. At 20 weeks, on August 2, 1971, her diabetes was controlled with 40 units of NPH insulin. Her vision had become progressively worse and she was told she had early cataracts.

Treatment consisted of bedrest, high protein-diabetic diet, and 40 units NPH insulin. She was discharged on August 7 and followed on an out-patient basis.

She was readmitted on September 4, 1971, when 25 weeks gestation for edema. Obstetrical consultation was obtained; it was planned to try to stabilize her diabetes, deliver her by cesarean section at 36 weeks and do a tubal ligation. If she should not be controlled, the pregnancy would be terminated earlier. She was discharged September 8, with a diagnosis of juvenile diabetes, albuminuria, hypoalbuminemia and edema.

She was readmitted on October 14, 1971, at 31 weeks because of edema. The patient's BUN was 32, her albumin was low at 1.6 mg%, and 3+ albuminuria was present. Hemoglobin was 8.8 gm%. Two units of whole blood in addition to salt-poor albumin were given. She had a weight loss of 4 lbs and was discharged.

She had an episode of shortness of breath with wheezing in early November, 1971. Her blood pressure was 182/120. Lasix plus aminophylline were given and she was typed and cross-matched for blood. She was digitalized on November 19. Her lungs cleared some, though there was inadequate diuresis. She was extremely edematous. Hemoglobin was 8.5 gm% on November 23 and more blood was given. Sodium was 108. Potassium was 3.6. This was felt to be due to water intoxication secondary to renal "difficulty" producing edema. The BUN was 51, Na 136, and potassium 5.9 on November 25. She was confused. Her condition was described as very poor. Hemoglobin was 7.4 gm% and packed cells were given.

She began having spontaneous uterine contractions at 8:00 p.m. on November 26 and delivered an unweighed stillborn at 11:47 p.m. with midline episiotomy and low forceps with a pudendal block. The placenta was expressed spontaneously and the episiotomy was repaired. She had abdominal distention and a naso-gastric tube was inserted.

On November 29 her temperature was elevated all day and she had a foul vaginal discharge. At 8:00 p.m. she had cardio-respiratory arrest. Attempts at resuscitation were unsuccessful.

There was no autopsy. The cause of death was felt to be septic pulmonary embolism from pelvic thrombophlebitis, diabetes, pregnancy, probably Kemmelsteil-Wilson disease.

Comments

The Committee classified this as an obstetrically and medically preventable death.

The successful outcome of pregnancies complicated by diabetes mellitus is more closely

related to quality of metabolic control than any other feature of management.

While this patient's problems and ultimately her demise are only indirectly related to her pregnancy, many of her complications may have been avoidable. It is well known that normal pregnancy is "diabetogenic" in the otherwise normal female. Overt diabetes is often markedly intensified and progressive deterioration may occur as in this case.

Rigid metabolic control approaching euglycemia whenever possible should be the ultimate goal in management of the diabetic gravida. Early and frequent hospitalization for evaluation and control is mandatory!

Certainly this patient's visual complaints at her initial hospitalization in the 20th week of gestation were indicative of progressive and generalized vascular involvement manifested as retinitis proliferns. On admission in her 25th week of gestation she had evidence of nephrotic syndrome, indicative of early renal failure. Permanent hospitalization at this point and possibly termination of the pregnancy may have resulted in a more favorable outcome. Her subsequent anemia, congestive heart failure, and other findings are indicative of progressive renal failure. The poor fetal outcome in this case again reflects generalized vascular disease which spares no organ system. Her terminal septic course points out the diabetic's propensity for contracting serious infection.

In the management of the more typical overt diabetic the major complication has been perinatal infant deaths. In addition to vigorous attempts at rigid control of maternal diabetes, one should hospitalize diabetic patients for delivery at 34-35 weeks gestation. Fetal maturity and well-being should be measured through the use of estriol determinations, ocytocin challenge test, lecithin/sphyngomyelin ratio, and amniotic fluid creatinine. Delivery should be timed in order to obtain a healthy and mature infant.

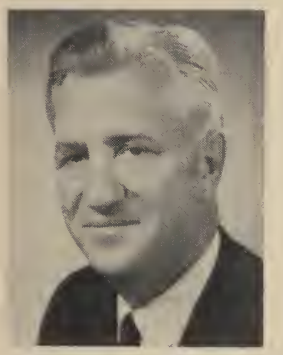
CORRECTIONS

Laboratory Testing of Hemophilus Influenzae. — In the article, "Ampicillin-Resistant *Hemophilus Influenzae:* Complacency Ends", published in the December, 1974, issue (12:655-657), the heading "l.b." on page 656 should read as follows: "b. Strains that show resistance, i.e., less than a 21 mm clear zone around the **10** mcg ampicillin disc[20] should be forwarded to CDC through the State Health Laboratory at Frankfort for further testing."

ORGANIZATION SECTION

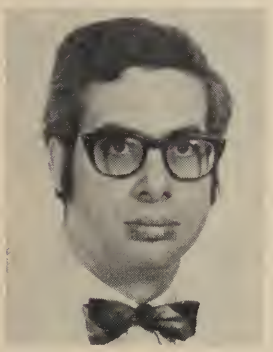
Emergency Health Care Seminar To Be Held June 4-5

The 5th Annual Emergency Health Care seminar will be held June 4-5 at the Executive Inn, Louisville. The program will include instruction on basic life support, demonstrations, lectures and practical experience.



Mr. McConnell

The featured luncheon speakers of the two-day seminar will be J. Ed McConnell, President of Blue Cross, Blue Shield and Delta Dental of Kentucky, and Barry H. Rumack, M.D., Director of the Rocky Mountain Poison Center, Denver, and assistant professor of pediatrics and medicine at the University of Colorado Medical Center.



Doctor Rumack

Mr. McConnell will speak on "Kentucky . . . My Kentucky, That Is" at the luncheon on Wednesday, June 4, and Doctor Rumack will discuss "Management of Acute Poisoning" during lunch on Thursday, June 5.

Morning and afternoon sessions will be held both days of the seminar; registration is at 8:00 a.m.

Continuing medical education credit will be given by the following organizations: AMA Physician's Recognition Award, credit per hour; American College of Emergency Physicians, 9 1/2 hours; American Academy of Family Physicians, 10 1/2 hours; and Kentucky Dental Association, 5 points. Credit has been applied for from the Kentucky Nurses Association.

For more information, contact KMA Headquarters Office. Pre-registration forms will be mailed with the April "Communicator".

KOMA Annual Meeting Set For May 9-10 in Louisville

The Kentucky Occupational Medical Association will hold its 16th Annual Meeting May 9 and 10 at the Ramada Inn, Hurstbourne Lane, Louisville.

The program will include presentations on: "Primary Care of the Traumatized Hand"; "Interpretation of Pulmonary Function Tests"; "The Changing Role of the Nursing Profession"; and "Treatment of Industrial Eye Injuries", among other important topics. George E. Spencer, M.D., Boston, Masachusetts, President of the American Occupational Medical Association, will discuss "The Changing World of Occupational Medicine".

A business meeting, social hour and dinner are also scheduled for Friday evening, May 9.

This meeting, co-sponsored by the University of Louisville School of Medicine, has been approved for Category I Credit toward the AMA Physician's Recognition Award.

The Southern Medical Association Cancer Information Center—Dial Access System is a means of obtaining recorded information over the telephone on topics relating to cancer. A catalog listing the topics is available by writing: Southern Medical Association, 2601 Highland Avenue, Birmingham, Alabama 35205. The toll-free phone system itself can then be used by the following procedure: dial 1-800-231-6970; identify yourself by name, address, city and state; and ask for a recording specifically by number, which will then be played for you. The hours for this service are Monday-Friday, 9:00 a.m.-9:00 p.m., and Saturday, 9:00 a.m-1:00 p.m.

The American Association of Medical Assistants will hold its 13th Annual State Convention on May 16-18 at the Holiday Inn North, Lexington. A weekend of education with speakers in the medical profession is planned that will aid the office assistant to perform more effectively. For complete information contact: Jeanne Howard, Convention Chairman 1975, 3669 Niles Court, Lexington 40502. The American Association of Medical Assistants is a professional association dedicated to the education and self-improvement of medical assistants, both on the job and through organizational activities. All assistants, secretaries, bookkeepers, nurses, technicians and receptionists may join AAMA if they are employed or supervised by a licensed physician on either a full-time or part-time basis.

"Medical Critical Dimension" In Ashland May 29

The fifth and final seminar of KMA's "Medical Critical Dimension, 1975" series will be May 29 at Bellefonte Country Club, Ashland, for the physicians of Boyd County and surrounding areas.



Doctor Parrott

Max H. Parrott, M.D., Portland, Oregon, AMA President-Elect, is the keynote speaker of the program, discussing "National Health Insurance and Its Ramifications". Harold B. McGuffey, Commissioner of Insurance of the Commonwealth of Kentucky, will speak on "The Liability Insurance Problem in Kentucky".

The program also includes Ned F. Parish, Chicago, President of the National Association of Blue Shield Plans, to discuss "The Role of Voluntary Pre-Payment Systems", and R. Glenn Greene, M.D., Chairman of KMA's Continuing Medical Education Committee, speaking on "Kentucky's Mandatory Medical Education Plan, 1975". Hoyt D. Gardner, M.D., KMA President, will provide a summary of the issues presented in "Medical Critical Dimension, 1975", and a question and answer period between the experts and physicians will follow.

The evening seminar convenes at 7:00 p.m. A social time at 5:30 p.m. and a dinner at 6:00 p.m. precedes the seminar.

For more information, contact KMA Headquarters Office or the Boyd County Medical Society.

Kentucky Surgical Society Meets At Lake Barkley

The Annual Meeting of the Kentucky Surgical Society will be a two-day meeting at Lake Barkley State Resort Park on May 23 and 24.



Doctor Drapanas

Theodore Drapanas, M.D., Henderson Professor and Chairman, Department of Surgery, Tulane University, New Orleans, Louisiana, is the Society's guest speaker. Doctor Drapanas will present two topics: "The Surgical Management of Reflux Gastritis" and "Recent Developments in the Hemodynamics of Portal Hypertension". There will be additional presentations by Society members.

For further information, contact the Kentucky Surgical Society, 319 South Limestone, Lexington 40508.

An advisory committee for the Cancer Center has been named by University of Louisville, aimed at providing a forum of communication between science, health facilities and the community. Condict Moore, M.D., professor of surgery at UL School of Medicine and Director of the Cancer Center explained that it is his hope that this advisory committee will involve the community in planning future efforts by the Center and involve the Center in basic community-wide concerns.

MEDIX, a new weekly, 30-minute TV series on medicine and health, is designed to provide viewers with health care information that will help them live normal and healthy lives. It is broadcast over the Public Broadcasting System stations.

AMA-ERF Medical Education Loan Guarantee Program Available to Medical Students

In addition to yearly unrestricted grants to each of the nation's medical schools, AMA-ERF also maintains a Medical Education Loan Guarantee Program. This Loan Program for medical students, interns, and residents is the result of a cooperative effort by American medicine and private enterprise. It is designed to help eliminate the financial barrier to medical education for all who are qualified and accepted by an approved medical school or training institution.

Money held in the Loan Guarantee Fund is held as a guarantee for repayment of loans issued by the several participating banks. At least 8% of all notes tained at the best available commercial bank rates tained at the best available commercial banks rates and a maximum of $1,500 may be borrowed in any 12 month period up to a total of $10,000 over seven years, provided that educational loans from all sources do not exceed $20,000.

All medical students, interns, and residents in good standing who are United States citizens may use this loan plan, provided they are enrolled in full-time training at an AMA-approved American medical school or hospital, can prove financial need, and have the approval of the medical school dean, Director, or Chief of Service as applicable. Since the program inception in 1962, over 52,000 loans ($60,000,000) have been made, many of these to physicians' children. One thousand two hundred of these loans have been made to students in Kentucky ($1,324,450).

Donations to the loan guarantee program of AMA-ERF are tax deductible and may be sent to AMA-ERF, 535 North Dearborn Street, Chicago, Illinois 60610, or to Mrs. William R. Meeker, Jr., 417 Fayette Park, Lexington, Ky. 40508, or to your county medical auxiliary AMA-ERF chairperson.

Practice Management Workshop and . . . .

The Kentucky Medical Association, in conjunction with AMA, will once again sponsor a Practice Management Workshop especially designed for physicians who are planning to go into private practice. The workshop is conducted by nationally-recognized professional consultants who can provide expert advice on starting and managing a medical practice, assessing the advantages and disadvantages of going into a partnership or group proctice, and overcoming current medicolegal problems. This full two-day program will be held April 22 and 23 at KMA Headquarters, and is limited to approximately 25 physicians in order to assure each participant ample opportunity to ask questions concerning his/her particular problems. Due to this limitation, registrations will be entered in the order in which they are received. Further information and registration forms may be obtained from the Headquarters Office.

Office Assistants Seminars To Be Held in Spring

The Second Annual seminars on Patient/Public Relations for the Office Assistant are being held around the state. The third seminar will be held April 24, 1975, in Covington. These seminars, which present public relations techniques to the personnel in doctors' offices, will once again be sponsored by KMA in conjunction with the Kentucky Chapter of the American Association for Medical Assistants. The seminars were extremely well attended last year, and we urge that reservations be made as soon as possible for 1975. Further information and registration forms may be obtained from the Headquarters Office.

In Memoriam

PAUL EDWIN CORUM, M.D.
Midway
1910-1975

Paul Edwin Corum, M.D., died at the age of 65. A 1935 graduate of the University of Louisville School of Medicine, Doctor Corum was a general practitioner. He was a member of the Kentucky Medical Association and the Woodford County Medical Society.

LELAND E. PAYTON, M.D.
Lynch
1891-1974

Leland E. Payton, M.D., died on November 17, 1974, at the age of 82. Doctor Payton, a general practitioner, graduated from the University of Louisville School of Medicine in 1923. He was a member of the Kentucky Medical Association, the American Medical Association, and the Harlan County Medical Society.

GRAND ROUNDS
References

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Letters To The EDITOR

To The Editor:

I am writing you concerning Kentucky MECO '75, a program in which Kentucky's medical students are given real exposure to clinical medicine throughout our state.

As you may know, MECO—Medical Education Community Orientation—gives preclinical medical students exposure to a hospital, clinical or private practice during the summer months.

Last Year MECO placed 80 students in clinical locations, many of which were in areas needing physicians. One of MECO's main objectives is to familiarize students with practice settings of real need and away from the two schools. This may encourage students to locate in areas lacking sufficient numbers of physicians.

Exposure to an area does not mean that a student will return to practice. There is, however, little chance that a student will locate in an area to which he has never had contact. Few of our students would have this exposure were it not for MECO. It is valuable for medical students to work with medical practitioners meeting heavy clinical pressures with responsibility and self reliance. Reportedly, their summer experiences are also of direct value to practitioner-teachers and small hospitals.

If you are interested in more information on the scope, objectives and implementation of MECO, please contact:

Mr. Charles Laudadio, Sophomore Student
SAMA-MECO Director
University of Louisville Medical Center
Louisville, Kentucky 40202

A brochure and application will then be sent upon your request.

Thank you for your thoughtfulness in these matters.

Arthur H. Keeney, M.D.
Dean, University of Louisville
School of Medicine

PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension
Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.
Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).
Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.
Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.
Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

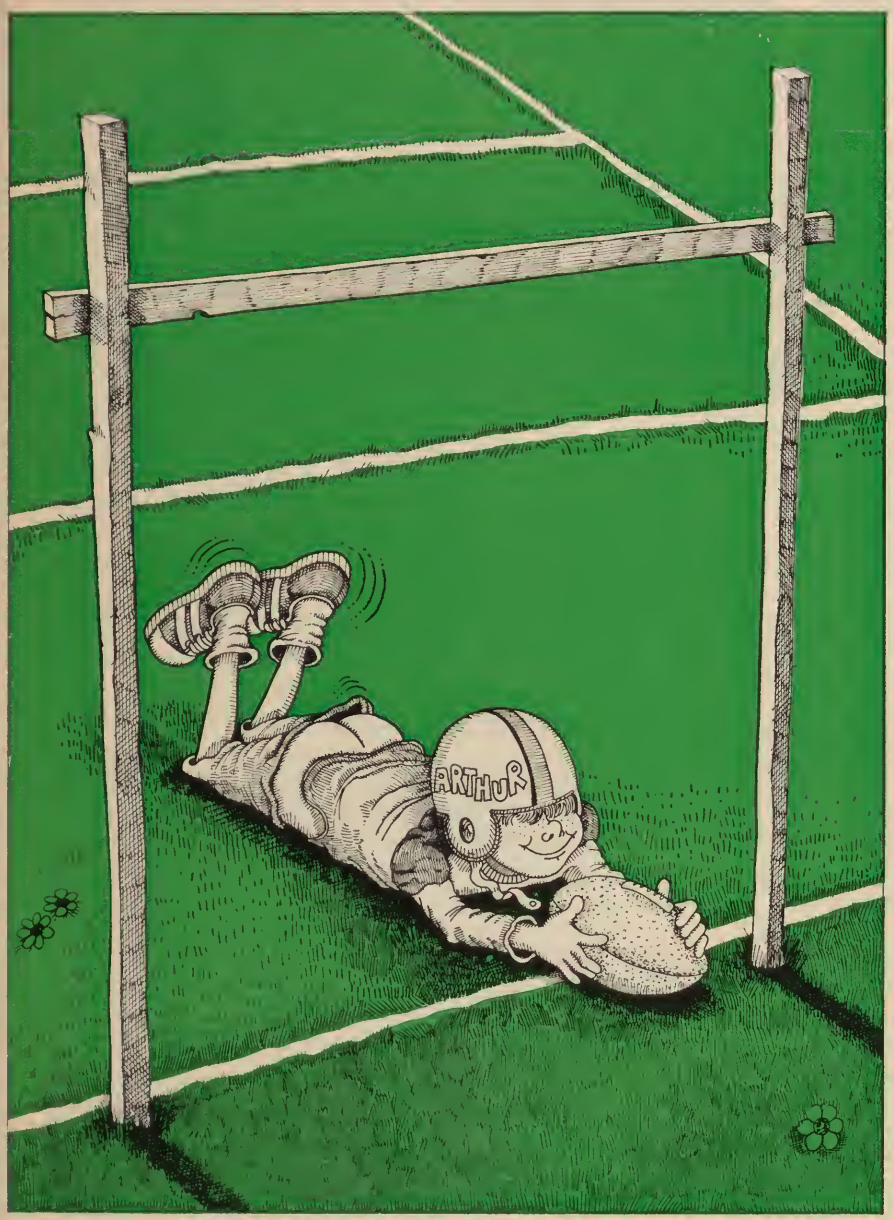
Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.
Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.
How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

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New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp.=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

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(pyrantel pamoate)

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ORAL SUSPENSION

*Data on file at Roerig.

Please see prescribing information on facing page.

11TH POSTGRADUATE SYMPOSIUM ON RHEUMATIC DISEASES

THURSDAY, MAY 8, 1975

9:00 a.m.—5:00 p.m.

AUDITORIUM, HEALTH SCIENCES CENTER

UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE

On Preston between Chestnut & Walnut Streets

SPONSORED BY THE UNIVERSITY OF LOUISVILLE SCHOOL OF MEDICINE AND THE KENTUCKY ARTHRITIS FOUNDATION

TOPIC: CLINICAL ASPECTS AND MANAGEMENT

This symposium emphasizes clinical aspects and management of various rheumatic diseases. Topics will include osteoporosis, gout, advances in laboratory procedures, unusual rheumatic disorders including Behcet's and Reiter's diseases, new drug therapy in arthritis, and biomechanics and surgery of the arthritic knee. Panel discussions with audience participation will conclude the morning and afternoon sessions.

PROGRAM DIRECTOR: DAVID H. NEUSTADT, M.D.

GERSON C. BERNHARD, M.D. The Medical College of Wisconsin	*Unusual Rheumatic Disorders: Diagnosis and Management*
RODNEY BLUESTONE, M.B., M.R.C.P. UCLA School of Medicine	*Advances in Laboratory Tests in Rheumatic Diseases*
DONALD B. KETTELKAMP, M.D. Indiana University School of Medicine	*Biomechanics and Surgery of the Arthritic Knee*
MARK N. MUELLER, M.D. University of Wisconsin School of Medicine	*Osteoporosis: New Clinical Procedures and Management*
GERALD P. RODNAN, M.D. University of Pittsburgh	*Gout: Clinical Features and Management*
JACK ZUCKNER, M.D. St. Louis University School of Medicine	*New Drug Therapy in Rheumatic Disorders*

Approved for seven accredited hours by American Academy of Family Physicians and credit toward Physician's Recognition Award of AMA.

FOR FURTHER INFORMATION CONTACT KENTUCKY ARTHRITIS FOUNDATION, 1381 BARDSTOWN RD., LOUISVILLE, KY. 40204 AC (502) 459-6460.

The Bactrim™ edge

Each tablet contains 80 mg trimethoprim and 400 mg sulfamethoxazole.

A high assurance of clinical efficacy

- in cystitis, pyelonephritis and pyelitis diagnosed as chronic
- against susceptible strains of the common urinary tract pathogens, usually *E. coli, Klebsiella-Enterobacter, Proteus mirabilis,* and, less frequently, indole-positive proteus species.



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Enterobacter, Proteus mirabilis,* and, less frequently, indole-positive proteus species).

Note: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in chronic and recurrent urinary tract infections.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia in elderly patients on diuretics, primarily thiazides. Sore throat, fever, pallor or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. Data are insufficient to recommend use in infants and children under 12.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, allergy or bronchial asthma; and in those with glucose-6-phosphate dehydrogenase deficiency, where hemolysis may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12.

Usual adult dosage: Two tablets b.i.d. for 10 to 14 days. For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

Supplied: Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 1000; Prescription Paks of 40, available singly and in trays of 10.

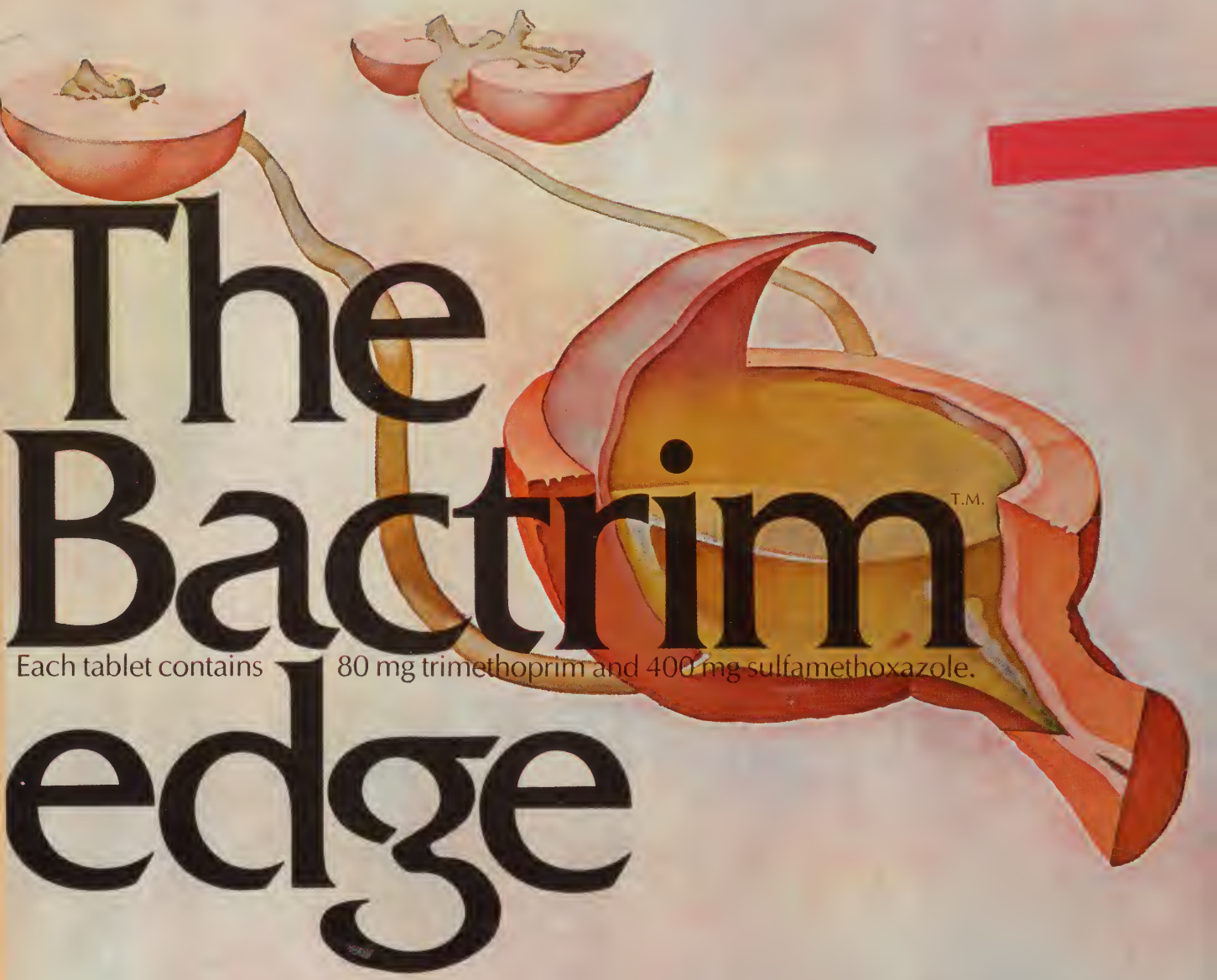
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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

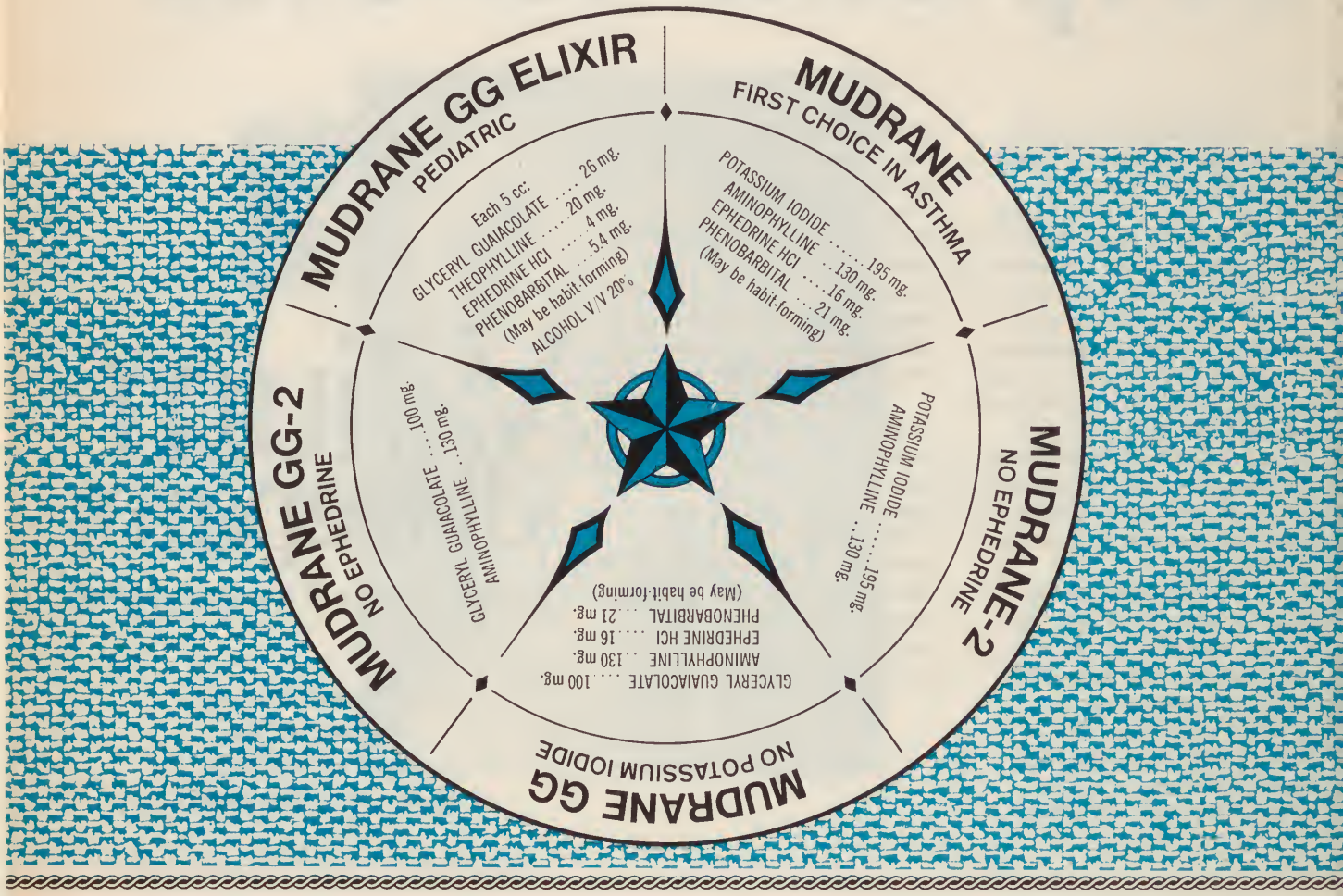
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

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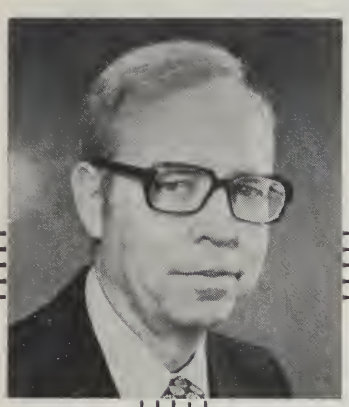
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12th ....WILLIAM T. WATKINS, 500 Bourne Ave., Somerset 42501 (606) 678-8155 1977
13th ....J. WESLEY JOHNSON, 2301 Lexington Ave., Ashland 41101 (606) 325-1151 1976
14th ....JERRY D. FRAIM, Euclid Avenue, Paintsville 41240 (606) 789-3578 1977
15th ....HAROLD L. BUSHEY, 406 Knox St., Box 770, Barbourville 40906 (606) 546-3024 .1975

BUYERS GUIDE

MAY BUYERS GUIDE FOR JOURNAL OF KMA 1975

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MESSAGE FROM THE PRESIDENT



Amicus Curiae

DEFINITION: Politics—Those accommodations of human honor that make it possible for people to live and govern collectively.

Politics not infrequently do make us take refuge in incredulity, but what other action of mankind (personkind) does not similarly afflict us?

Perhaps the position of leadership is so esteemed that we expect too much from the chosen. Maybe again we do not choose wisely, or still maybe the ones best for leading are not so inspired to participate. Whatever the reasons for disappointment, this system of democracy remains our government and, regardless of any condemnation of hindsight or "sour grapes", it has taken us past many rocky shoals and to date, at least, has harbored us well and in affluence as a whole.

Since much scorn is heaped, and a goodly proportion of it by nonparticipants, should we not all try to rekindle our spirits by finding inspiration from written and spoken words? Here are a few that have been gleaned from the past.

"America is a willingness of the heart."—F. Scott Fitzgerald.

"The age of miracles is here forever."—Carlyle, in *Heroes and Hero Worship.*

"Don't sell out. Stop wasting time predicting the future of mankind, but become an active part in creating it."—Nietzsche.

"If you are going to be in this world, be a part of it, not a residue."—Senator Edmund Muskie.

"The worst sin one can be capable of would be to become indifferent to the human spirit." —Abraham Lincoln.

"Politics are emotions efficiently organized."—James Farley.

To place our profession in juxtaposition for analysis and hopefully future action, consider objectively the following.

I. We bemoan loss of individuality but bring no major effort to individually defend ourselves. II. We acknowledge others expenditures in their behalf but refuse to give in our own. III. We beseech freedom for all but bring only small efforts to maintain this we now have. IV. We decry inflation but send free spenders to high public office. V. We exclaim for personal accomplishment but allow collectivism. VI. We denounce despair but we frequently express loss of hope. VII. We postulate need for new ideas but maintain rigidity for tradition and past precedent. VIII. We are the most affluent profession in the most affluent times in the most affluent country but claim pecuniary reasons for our lack of financial support for the causes in which we believe.

The world crises in the battle for men's minds is deepening. There is no need for dreary forecasting of doom. Anything can be accomplished if people want to and any system will work if people wish it so.

My colleagues and friends, then let us begin those essential steps of persuasion that are prime ingredients to success in those accommodations of human honor that makes it possible for people to live and govern collectively. Time—Effort—Information—Money—Understanding—Belief.

It will be worth it. It's done by you, but it is shared by everybody forever.

HOYT D. GARDNER, M.D.

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

MAY

14-16 Symposium on Genito-Urinary Radiology*, Lexington Hilton, Lexington. Fee: $225

14-17 Annual KAFP Scientific Seminar, Ramada Inn, Louisville

15 Medical Aspects of Sports, Eastern Kentucky University, Richmond

21 "Glucagon in Diabetes", 6:30 p.m., Jewish Hospital, Louisville

22-25 "Internal Medicine Update 1975," Barren River, Cadiz. Fee: $50 (ACP members)

23-24 Kentucky Surgical Society, Lake Barkley

27-28 Seminar on Alcoholism, Executive Inn, Louisville

28 "Life Support Systems",** 6:00-9:00 p.m., St. Joseph Infirmary, Louisville

29-31 Spring Annual Meeting, Kentucky OB-GYN Society, Lexington Hilton, Lexington. Chairman: Preston Nunnelley, M.D., Lexington

JUNE

1-5 Surgery Review,* UK Medical Center, Lexington. Fee: $175

4-5 Emergency Health Care Seminar, Executive Inn, Louisville

21 National Association of Children's Hospitals and Related Institutions, Galt House, Louisville

22 American Society for Photobiology, Louisville

26 PAS Regional Quality Assurance Workshop, Louisville

26 Hypertension 1975,* UK Medical Center, Lexington. Fee: $20

27-28 Evaluation & Management of Cardio-Pulmonary Emergencies,* UK Medical Center, Lexington. Fee: $75

SEPTEMBER

23-25 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

OCTOBER

27-31 Gerontological Society, Galt House, Louisville

*For information, contact: Frank R. Lemon, M.D., Associate Dean of Extra-Mural Affairs, UK College of Medicine, Lexington 40506

**Contact: Gerald D. Swim, Director, Office of Continuing Education, University of Louisville School of Medicine

IN SURROUNDING STATES

MAY

14-15 Indiana Multidisciplinary Child Care Conference, Stouffer's Indianapolis Inn

16-18 "Quality Assurance in Ambulatory Care", Sheraton Westgate Motor Inn, Toledo, Ohio

17-19 National Association of Blue Shield Plans, Drake Hotel, Chicago

19-23 "Advances in Internal Medicine", University of Cincinnati General Hospital and Medical Center

27-31 Diagnostic Roentgenology, Cincinnati General Hospital

29-31 Microneurosurgery Symposium, Cincinnati Convention Center

JUNE

2-6 "Hematology and Oncology, 1975", Center for Continuing Education, University of Chicago

8-10 Medicolegal Implications of Emergency Medical Care, Statler Hilton Hotel, Washington, D.C.

8-13 American Academy of Facial Plastic & Reconstructive Surgery, Chicago

14-19 AMA Annual Convention, Atlantic City, N.J.

23-25 "Critical Care—Postgraduate Course in Clinical Assessment for Nurses & Physicians," Hyatt Regency Hotel, Nashville. Fee: $115.

JULY

4-5 Society of Phillipine Surgeons in America, King's Island Inn, Cincinnati

21-26 Current Concepts in Radiology, Atlantis Lodge, Atlantic Beach, North Carolina

23-Aug. 1 "Human Sexuality", Institute for Sex Research, Indiana University, Bloomington. Fee: $285

AUGUST

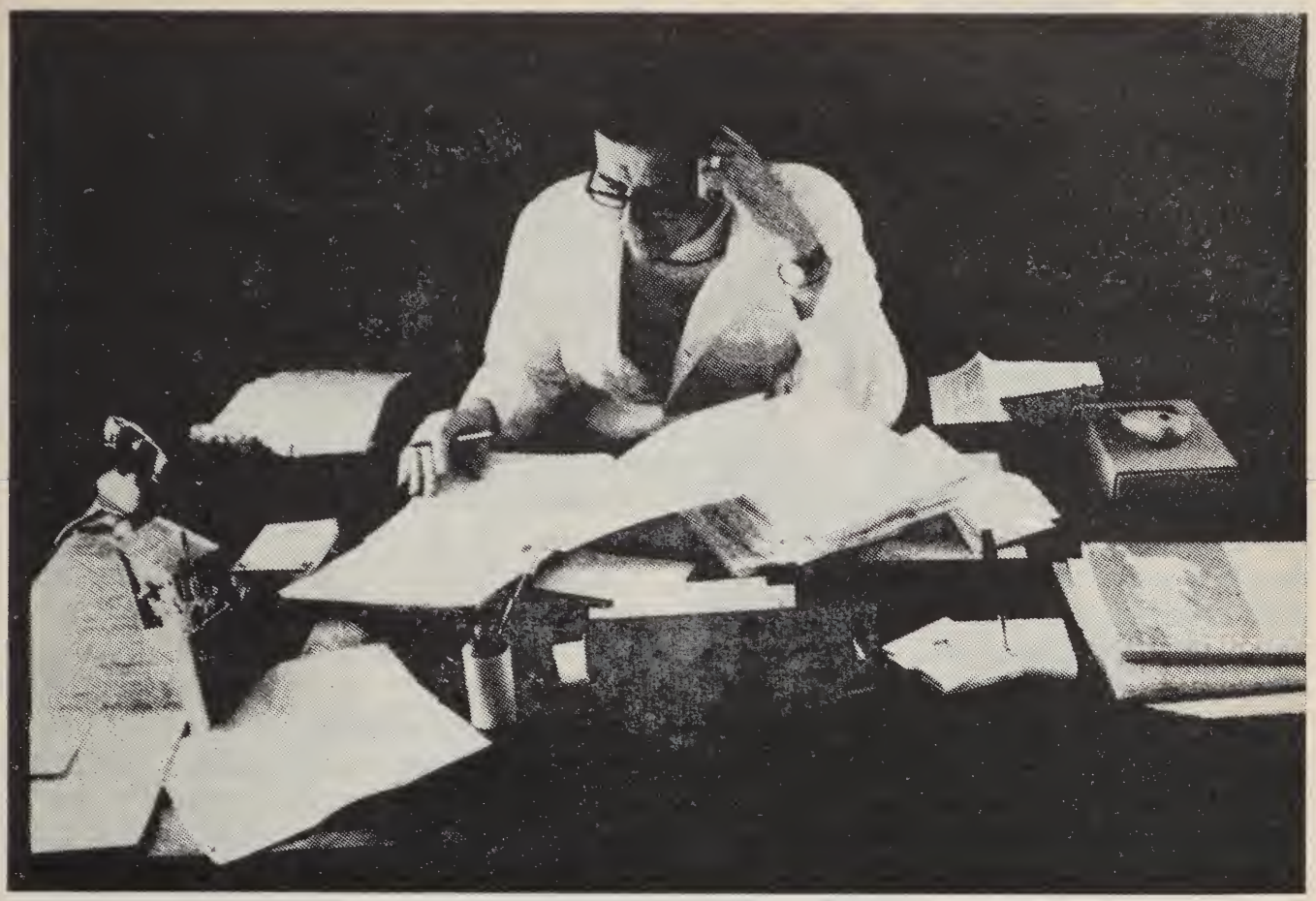
18-21 American Hospital Association, Chicago

OCTOBER

6-9 American Academy of Family Physicians, Palmer House, Chicago

7-12 Society for Clinical & Experimental Hypnosis Annual Scientific Program & Workshops, Center for Continuing Education, University of Chicago

20-21 Tennessee Valley Medical Assembly, Read House, Chattanooga



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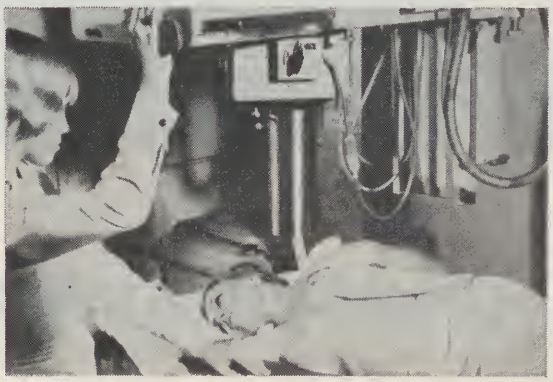
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Medicine. Not Business.
Air Force Physician

Breast Cancer: earlier warning system

Futility and frustration beset the physician confronted with breast cancer. For the last 35 years, the survival rate has not significantly changed despite intensive educational programs aimed at earlier detection, and improvement in treatment techniques.

What is the outlook? We know the key to reducing mortality from breast cancer is in the *earliest possible* diagnosis. The stage at which breast cancer is detected is *crucial* to the outcome of treatment. By the time a lump is discovered through BSE or clinical examination, critical time may have been lost.



Mammography



Thermography

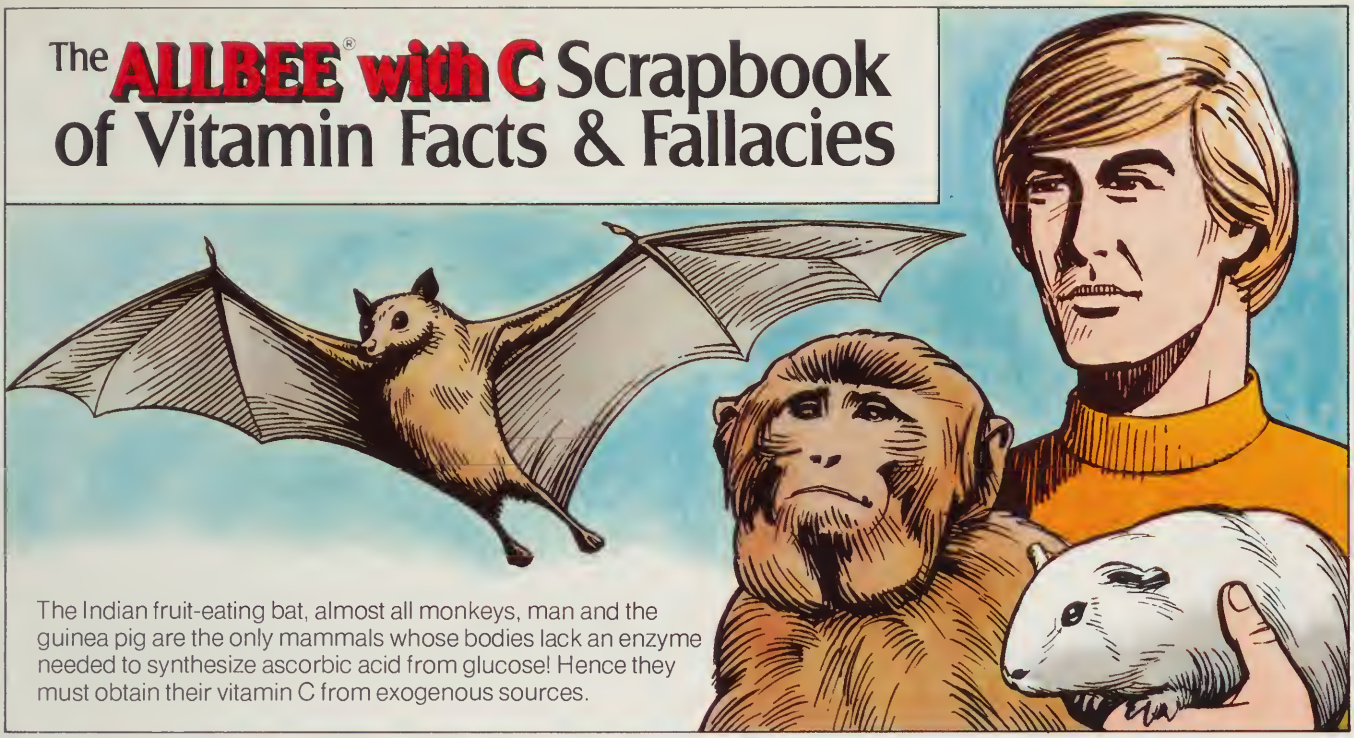
And we *do* have the means to achieve earlier diagnosis. We do have an *earlier* warning system. Mammography and thermography can detect breast cancer *before* a lump is discernible by palpation. To demonstrate that it is practical and feasible to detect breast cancer earlier by using these modalities, the American Cancer Society and the National Cancer Institute are funding a network of breast cancer demonstration projects. Supported by grants of $2-million from the ACS and $4-million from the NCI, 20 such centers are expected to be operative across the country by the end of the year. Each will screen at no charge, approximately 5,000 women annually, in what is considered to be the ideal detection program—to include clinical examination, mammography and thermography. Each of these detection methods contributes independently to the detection of breast cancer, and none can be dispensed with in the search for early disease.

At present we cannot prevent breast cancer, but the potential for saving more lives is immense. The five-year survival rate surges dramatically from 53% when axillary nodes are positive, to approximately 85% when the disease is localized, to nearly 100% for in-situ cancer.

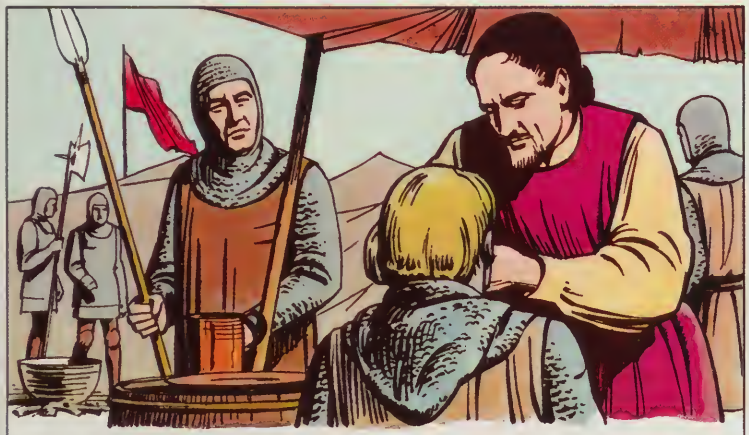
We have an earlier warning system. Let's use it.

® american cancer society

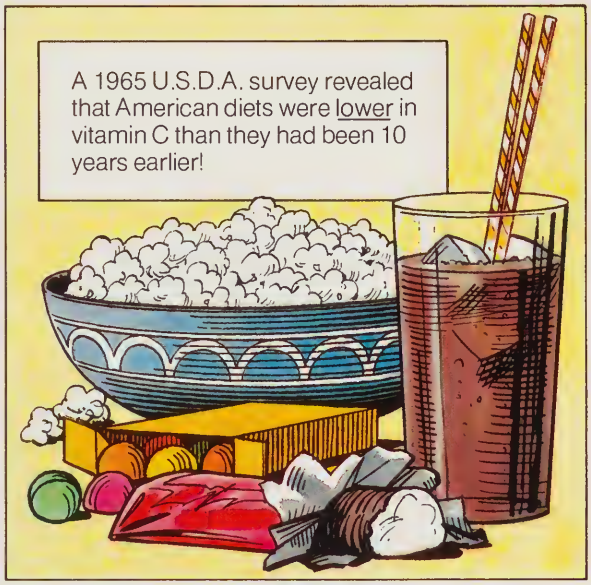
The ALLBEE® with C Scrapbook of Vitamin Facts & Fallacies



The Indian fruit-eating bat, almost all monkeys, man and the guinea pig are the only mammals whose bodies lack an enzyme needed to synthesize ascorbic acid from glucose! Hence they must obtain their vitamin C from exogenous sources.



De Joinville writing about a 13th century crusade reported that barber surgeons had to "cut away the dead flesh from the gums to enable people to masticate their food." The disease he described was probably scurvy.



A 1965 U.S.D.A. survey revealed that American diets were lower in vitamin C than they had been 10 years earlier!



The outer leaves of cabbage and brussels sprouts contain more vitamin C than the heads. Yet, ironically, these are often trimmed away by the grocer to improve appearance and enhance sales appeal! Many housewives trim them even more before cooking!

Available on your prescription or recommendation

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High Potency B-Complex and Vitamin C Formula



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atropine sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
phenobarbital (warning: may be habit forming)	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.

Brief summary. Adverse Reactions: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Contraindications: Glaucoma; renal or hepatic disease; obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); or hypersensitivity to any of the ingredients.

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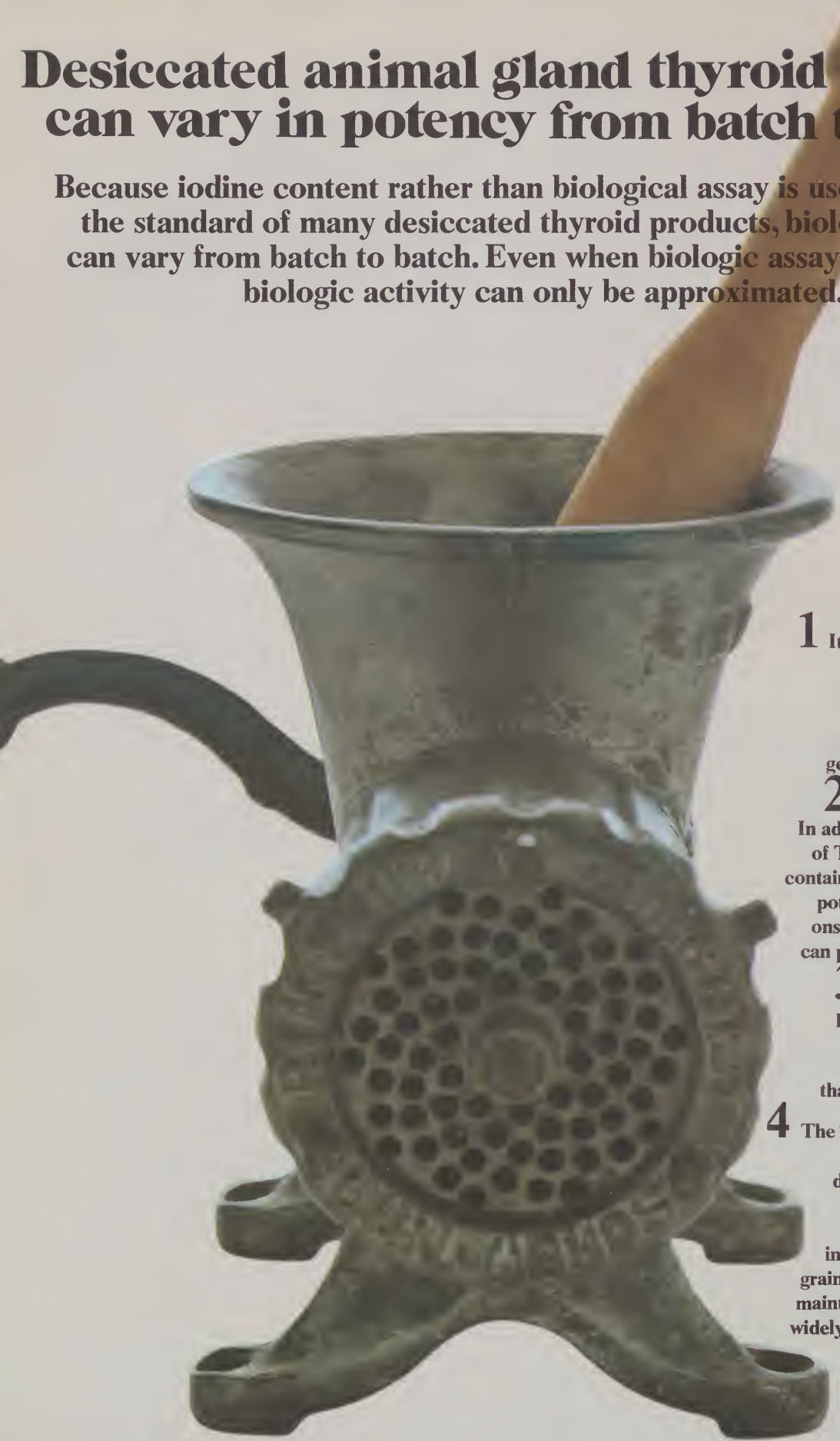
Synthroid®

(sodium levothyroxine, U.S.P.) FLINT



Desiccated animal gland thyroid products can vary in potency from batch to batch.

Because iodine content rather than biological assay is used to measure the standard of many desiccated thyroid products, biologic activity can vary from batch to batch. Even when biologic assay is employed, biologic activity can only be approximated.



1 It is recognized that T_4 and T_3 content in desiccated thyroid and thyroglobulin varies from animal to animal, by animal species, geography, and animal diet.

2 Of therapeutic concern: In addition to varying amounts of T_4, desiccated thyroid may contain varying amounts of T_3, a potent compound with rapid onset and fleeting action that can produce metabolic surges.

3 Even when kept under proper storage conditions, desiccated thyroid deteriorates more rapidly than the synthetic hormone.

4 The "usual maintenance dose" for the widely prescribed desiccated thyroid is "from 1 grain to 3 grains per day, but it may vary, in individual patients from 1/2 grain to 10 grains."[1] The "usual maintenance dose" of the most widely prescribed thyroglobulin (which is also a desiccated thyroid product) is "0.5 to 3.0 grains daily."[2]

1. Armour Thyroid (Tablets). 1975 Physicians' Desk Reference. p. 561.
2. Proloid® (thyroglobulin). 1975 Physicians' Desk Reference. p. 1575.

Every batch of Synthroid® T_4 is of controlled potency. (sodium levothyroxine, U.S.P.) FLINT



SYNTHROID is T_4. It provides your patients with everything they need for complete thyroid replacement therapy.

1 Sodium levothyroxine is *not derived* from any animal gland source. It is a synthetic and, since sodium levothyroxine is the only active ingredient, its weight is the sole determinate of potency.

2 SYNTHROID (sodium levothyroxine) is T_4 which is converted by the patient to T_3 at the cellular level, thereby providing a physiologic source and amount of T_3 to meet metabolic needs for complete thyroid replacement therapy. Because the onset of effect is slower and more steady, the possibility of sudden metabolic surges is reduced with SYNTHROID therapy.

3 SYNTHROID (sodium levothyroxine) products have a longer and more reliable shelf life than Thyroid U.S.P. when kept under the same proper storage conditions. There is no animal protein present in SYNTHROID products.

4 A recent study of 44 patients with hypothyroidism indicates that 89 percent of the patients were maintained with doses of L-thyroxine (SYNTHROID) between 100 mcg. and 200 mcg. (0.1 mg. and 0.2 mg.) per day.[3]

3. Stock, J.M., Surks, M.I., and Oppenheimer, J.H.: Replacement dosage of L-thyroxine in hypothyroidism. A re-evaluation. New Engl. J. Med. *290*:529-33, 1974.

Eliminates many of the uncertainties of desiccated thyroid therapy.

Synthroid®

(sodium levothyroxine, U.S.P.) FLINT

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See reverse side for full prescribing information.

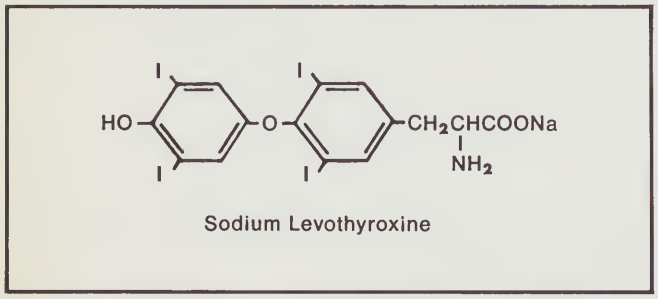
Synthroid®
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Synthroid Tablets—for oral administration
Synthroid for Injection—for parenteral administration



Description

SYNTHROID (sodium levothyroxine) **Tablets** and SYNTHROID **Injection** contain synthetic crystalline sodium levothyroxine (L-thyroxine). L-thyroxine is the principal hormone secreted by the normal thyroid gland.



Sodium Levothyroxine

Actions

SYNTHROID (sodium levothyroxine) **Tablets,** taken orally, provide hormone that is readily absorbed from the gastrointestinal tract. SYNTHROID **Injection** is effective by any parenteral route. Following absorption, the synthetic L-thyroxine provided by SYNTHROID products cannot be distinguished from L-thyroxine that is endogenously secreted. Each is bound to the same serum proteins and each exhibits a six to seven day circulating half-life in the euthyroid individual.

Both SYNTHROID products will provide L-thyroxine as a substrate for physiologic deiodination to L-triiodothyronine. Therefore, patients taking SYNTHROID products will demonstrate normal blood levels of L-triiodothyronine even when the thyroid gland has been surgically removed or destroyed by radioiodine. Administration of levothyroxine alone will result in complete physiologic thyroid replacement.

Indications

SYNTHROID (sodium levothyroxine) products serve as specific replacement therapy for reduced or absent thyroid function of any etiology. SYNTHROID **Injection** can be used intravenously whenever a rapid onset of effect is critical, and either intravenously or intramuscularly in hypothyroid patients whenever the oral route is precluded for long periods of time.

Contraindications

There are no absolute contraindications to SYNTHROID (sodium levothyroxine) therapy. Relative contraindications include acute myocardial infarction, uncorrected adrenal insufficiency and thyrotoxicosis. (See WARNINGS)

Warnings

Patients with cardiovascular diseases warrant particularly close attention during the restoration of normal thyroid function by any thyroid drug. In such cases, low initial dosage increased slowly by small increments is indicated. Occasionally, the cardiovascular capacity of the patient is so compromised that the metabolic demands of the normal thyroid state cannot be met. Clinical judgment will then dictate either a less-than-complete restoration of thyroid status or reduction in thyroid dosage.

Endocrine disorders such as diabetes mellitus, adrenal insufficiency (Addison's disease), hypopituitarism and diabetes insipidus are characterized by signs and symptoms which may be diminished in severity or obscured by hypothyroidism. SYNTHROID (sodium levothyroxine) therapy for such patients may aggravate the intensity of previously obscured symptoms and require appropriate adjustment of therapeutic measures directed at these concomitant disorders.

Thyroid replacement may potentiate the effects of anticoagulants. Patients on anticoagulant therapy should have frequent prothrombin determinations when instituting thyroid replacement to gauge the need to reduce anticoagulant dosage.

Precautions

Overdosage with any thyroid drug may produce the signs and symptoms of thyrotoxicosis, but resistance to such factitious thyrotoxicosis is the general rule. With SYNTHROID (sodium levothyroxine) **Tablets,** the relatively slow onset of action minimizes the risk of overdose but close observation in the weeks following institution of a dosage regimen is advised. Treatment of thyroid hyperactivity induced by oral medication is confined to interruption of therapy for a week, followed by reinstitution of daily therapy at an appropriately reduced dosage.

Adverse reactions

Adverse reactions are due to overdose and are those of induced hyperthyroidism.

Dosage and administration

For most adults, a final dosage of 100 mcg (0.1 mg) to 200 mcg (0.2 mg) of SYNTHROID (sodium levothyroxine) **Tablets** daily will restore normal thyroid function and only occasionally will patients require larger doses. Failure to respond adequately to a daily oral intake of 400 mcg (0.4 mg) or more is rare and should prompt reconsideration of the diagnosis of hypothyroidism, special investigation of the patient in terms of malabsorption of L-thyroxine from the gastrointestinal tract or poor adherence to therapy.

The concomitant appearance of other diseases, especially cardiovascular diseases, usually dictates a replacement regimen with initial doses smaller than 100 mcg/day (0.1 mg).

In otherwise healthy adults with relatively recent onset of hypothyroidism, full replacement dose of 150 mcg (0.15 mg) or 200 mcg (0.2 mg) has been instituted immediately without untoward effect and with good therapeutic response. General experience, however, favors a more cautious approach in view of the possible presence of subclinical disorders of the cardiovascular system or endocrinopathies.

The age and general physical condition of the patient as well as the severity and duration of hypothyroid symptoms determine the starting dosage and the rate of incremental dosage increase leading to a final maintenance dosage. In the elderly patient with long standing disease, evidence of myxedematous infiltration and symptomatic, functional or electrocardiographic evidence of cardiovascular dysfunction, the starting dose may be as little as 25 mcg (0.025 mg) per day. Further incremental increases of 25 mcg (0.025 mg) per day may be instituted at three to four week intervals depending on patient response. Conversely, otherwise healthy adults may be started at higher daily dosage and raised to the full replacement dosage in two to three weeks. Clearly it is the physician's judgment of the severity of the disease and close observation of patient response which determines the rate of dosage titration.

Laboratory tests to monitor thyroid replacement therapy are of limited value. Although measurement of normal blood levels of thyroxine in patients on replacement regimens frequently coincides with the clinical impression of normal thyroid status, higher than normal levels on oral replacement of levothyroxine occasionally occurs and should not be considered evidence of overdosage per se.

In all cases, clinical impression of the well-being of the patient takes precedence over laboratory determination in determining the appropriate individual dosage.

In infants and children, there is a great urgency to achieve full thyroid replacement because of the critical importance of thyroid hormone in sustaining growth and maturation. Despite the smaller body size, the dosage needed to sustain a full rate of growth, development and general thriving is higher in the child than in the adult, as much as 300 mcg (0.3 mg) to 400 mcg (0.4 mg) per day.

In myxedema coma or stupor, without concomitant severe heart disease, 200 to 500 mcg of SYNTHROID **Injection** may be administered intravenously as a solution containing 100 mcg/ml. Although the patient may show evidence of increased responsivity within six to eight hours, full therapeutic effect may not be evident until the following day. An additional 100 to 300 mcg or more may be given on the second day if evidence of significant and progressive improvement has not occurred. Like the oral dosage form, SYNTHROID **Injection** produces a predictable increase in the circulating level of hormone with a long half-time. This usually precludes the need for multiple injections but continued daily administration of lesser amounts intravenously should be maintained until the patient is fully capable of accepting a daily oral dose.

In the presence of concomitant heart disease, the sudden administration of such large doses of L-thyroxine intravenously is clearly not without its cardiovascular risks. Under such circumstances, intravenous therapy should not be undertaken without weighing the alternative risks of the myxedema coma and the cardiovascular disease. Clinical judgment in this situation may dictate smaller intravenous doses of levothyroxine.

SYNTHROID **Injection** by intravenous or intramuscular routes can be substituted for the oral dosage form when ingestion of SYNTHROID **Tablets** is precluded for long periods of time.

How supplied

SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in 6 concentrations: 25 mcg (0.025 mg)—orange . . . 50 mcg (0.05 mg)—white . . . 100 mcg (0.1 mg)—yellow . . . 150 mcg (0.15 mg)—violet . . . 200 mcg (0.2 mg)—pink . . . 300 mcg (0.3 mg)—green. Depending on strength, these tablets are available in bottles of 100, 500, 1000 and 5000.

SYNTHROID (sodium levothyroxine) for **Injection** is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, U.S.P. A separate 5 ml vial containing Sodium Chloride Injection, U.S.P. is provided as a diluent.

Directions for reconstitution

Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml of the Sodium Chloride Injection, U.S.P. to the vial. Shake vial to insure complete mixing. **Use immediately** after reconstitution. Discard any unused portion.

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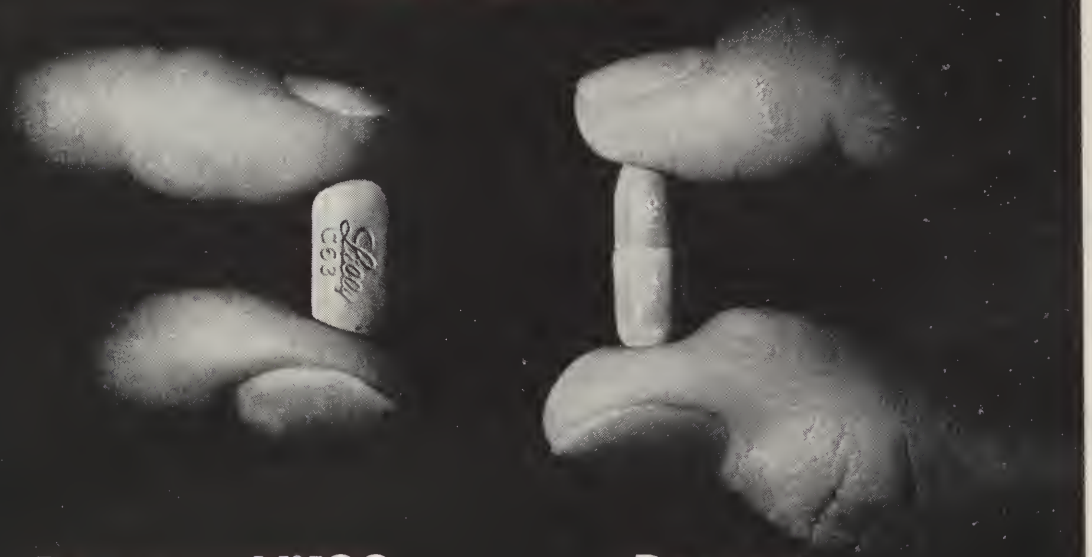
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The JOURNAL of the
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VOLUME 73 MAY 1975 No. 5

Chemonucleolysis

CHRISTOPHER B. SHIELDS, M.D.*
Louisville, Kentucky

*Since initiation of clinical trials of chymopapain (Discase[R**]) for lumbar disc disease in 1963, nearly 10,000 patients have been treated. To date, its use remains experimental and continues to undergo clinical evaluation by orthopedic and neurological surgeons.*

IN 1956, Thomas[1] noted that intravenous papain caused drooping of ears of rabbits. Hirsh[2] later proposed its use as a chondrolytic enzyme in the treatment of prolapsed intervertebral discs, but not until 1963 did Smith[3] carry out encouraging trials demonstrating the discolytic effect of chymopapain in rabbits. Smith[4] later published his first report of 10 patients recording favorable short-term results.

Pharmacology

Chymopapain is a colorless proteolytic enzyme isolated from the leaf of the tropical papaya plant. Its mechanism of action has not been determined; however, studies of its biochemical, pharmacological, and physiological action are continuing. Possibly the protein mucopolysaccharide complex constituting the major portion of the nucleus pulposus is attacked immediately and specifically by this drug.[5]

Its immediate action is suggested by the frequent relief of sciatica within one hour following injection and by the cloudy reflux frequently obtained in the syringe on release of the plunger after its injection. Its specificity is well recognized experimentally as a dose of only .01 to .15 mg per disc in rabbits, and .08 to 1 mg per disc in dogs[6] will completely dissolve the nucleus pulposus. Doses up to 100 times greater than that required to consistently dissolve the nucleus pulposus in these species were tolerated when injected intravenously, intradiscally, and epidurally.[7] Massive doses given intravenously resulted in breakdown in endothelial tight junctions causing hemorrhages in the heart, pericardium, and peritoneum. Chymopapain injected intrathecally in large doses is highly toxic—LD50 in dogs being .25 mg per kg.[7]

Selection of Patients

In 1974, the Travenol Laboratories requested that the American Association of Neurological Surgeons preside over a new clinical trial of chymopapain to determine its safety and efficacy in lumbar disc disease prior to general release. The Section of Neurosurgery, University of Louisville, is one of the units carrying out this investigation. Permission for local use has been obtained from the Committee of Human Experimentation, University of Louisville, permitting the use of Discase in the Norton-Children's Hospital and Louisville General Hospital. Permission for its use in the Veterans Administration Hospital has also been obtained.

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Rigorous criteria have been set for patient inclusion into the series.[7] Individuals must be 21 to 65 years of age, in good general health, and have the classic picture of lumbago and sciatica such as: numbness, weakness, reflex changes, and limited straight leg raising. Each candidate must receive an adequate trial of conservative therapy following which he is still incapacitated by symptoms preventing him from work or normal recreation. A patient should never be injected while in remission. If either surgery or chymopapain injection is contemplated during this stage, it should be postponed until the next acute attack. Pantopaque myelography is performed to confirm the diagnosis and the correct level prior to injection. Discography offers no information not obtained from myelography in our hands, and may obscure the final evaluation of chymopapain and is, therefore, not performed. Should any of the above criteria not be met, the patient is not considered for inclusion into the trial.

Definite contraindications to injection are patients with profound and rapidly progressing muscle weakness, any degree of urinary or anorectal dysfunction, pregnant women, or major allergy of any type. The occasional occurence of anaphylactic response following chymopapain injection precludes its use more than once.

If a candidate for surgical discectomy conforms to the criteria listed above and would otherwise be subjected to surgery, he is given the option of entering the trial. A description of the technique, previous results, and possible complications are outlined with the choice of leaving the trial at any time prior to treatment should he so choose.

Technique

The patient is placed in the prone position on a fluoroscopic table in the x-ray department. An anesthesiologist well apprized in the study is present throughout. The patient remains drowsy while under light general anesthesia (Innovar× or Pentazepam+), but is able to move on request for x-ray positioning. To minimize the possibility of anaphylactic reaction, 750 mg of hydrocortisone is given intravenously 90 to 180 minutes prior to chymopapain injection.

A posterolateral approach to the disc using a 6 inch, 18 gauge LP needle is used. The point of entry through the skin is approximately 4 inches to the left of the midline, immediately above the iliac crest, and is directed into the desired intervertebral disc under fluoroscopic control. A characteristic "give" is felt on piercing the annulus fibrosis, and the correct position of the needle tip is confirmed and recorded by spot AP and lateral x-rays (Figures 1 and 2). The L3-4 and L4-5 levels are relatively simple to enter, but L5-S1 more difficult due to the overhanging iliac crest. However, no injection had to be terminated due to our inability to enter this level. Only the disc causing signs and symptoms is injected, an asymptomatic myelographic defect not being treated. If doubt exists as to the level involved clinically, and two myelographic defects are demonstrated, both levels are injected. One cc of Discase is injected into the disc space and three characteristics noted:[9] (1) resistance to injection, (2) presence of white reflux, and (3) reproduction of symptoms.

Usually the resistance to injection is considerable as would be expected with an intact annulus fibrosis even if it were bulging. Great ease of injection suggests a tear in the annulus (sequestrated disc), with passage of the enzyme directly into the extradural space where it becomes diluted and probably has no significant effect on the extruded disc fragment. Disc sequestrations have been found in 10-40% of disc explorations in large surgical series.[9,10]

In about 50% of cases, a white reflux returned into the syringe immediately after injection. Chemical analysis of the reflux material has been undertaken giving unconvincing results, but we believe it to be a digestate of the nucleus pulposus, probably chondroitin sulfate.

Exacerbation of the characteristic sciatica is an encouraging sign confirming the correct level of injection. Absence of this symptom, however, is not significant since long-term results have been similar irregardless of its presence or absence.

Post injection the patient is kept in bed for 24 hours, after which time he may be up and about as tolerated, and discharged three to four days later. Neurologic evaluation, symptoms, work habits, and lumbar spine x-rays are reviewed at frequent intervals post injection.

× *Innovar — fentanyl and droperidol*
\+ *Pentazepam — pentazocine and diazepam*

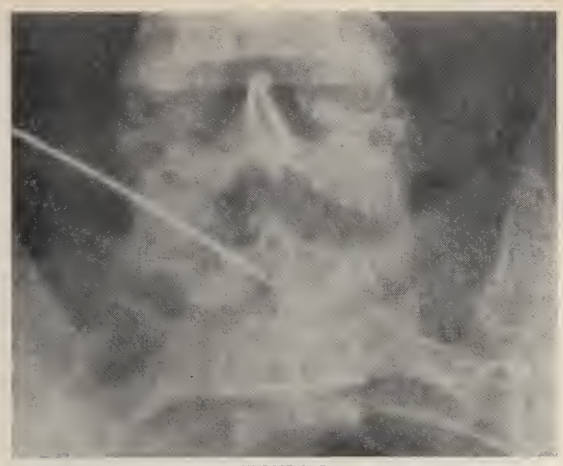


FIGURE 1



FIGURE 2

X-rays confirming the correct position of the needle in the central 1/3 of the disc space in AP (Figure 1) and lateral (Figure 2) positions.

Results

In an earlier publication[9] of 33 patients, the majority had relief of leg pain within 24 hours and others noted a slower disappearance over two to four days. Back spasm remained the predominant symptom in many patients; however, this was a different type of pain than their previous lumbago and invariably disappeared in 10 days. A few patients continued to improve for six months. A subsequent report[7] including 56 patients demonstrated good results in 75% with five obvious failures. Neither the level of disc injected, amount injected, duration of disc disease, nor age of the patient injected had any bearing on the ultimate result. Three of the five obvious failures were subjected to surgical discectomy within six days, each patient disclosing a sequestrated disc lying free in the extradural disc. Pathologic study showed normal nuclei pulposus with no morphologic alteration noted. It was apparent that compensation and litigation pending cases fared less well than the normal population. The only complication of this series was transient urinary retention in one patient the day of injection, followed by normal function the next day.

Discussion

Since Mixter and Barr[12] brought to general attention the fact that lumbago and sciatica could be caused by intervertebral disc protrusion or sequestration, the classic forms of therapy have been conservative, and surgical discectomy. The efficiency of each of these has been proven beyond doubt.

Scoville et al.[12] has recently reported 96% good-to-excellent results in 779 patients followed over 10 years. Spurling[13] reports 79% and 83% satisfactory results in two groups of patients totalling 700. Raaf[14] reports the following results in his 767 lumbar discectomies followed for at least one year: excellent 43%, good 37%, fair 14%, and poor 6%. He claims that patients receiving compensation fared less well than in those not receiving a permanent or partial disability award. In another series, Aitken and Bradford[15] reported only 30% good-to-excellent results, 25% fair results, and 45% poor or bad results in 170 patients.

Incidence of disc sequestration varies from 10-40%, which represents a group of patients which probably will not be helped by chymopapain. However, due to the inability to conclusively differentiate a protruded from a sequestrated disc on myelography, a trial injection is given.

Numerous investigators have reported their results using chymopapain to date. Parkinson and Shields[9] reported 75% good results, 18% slight, and 7% poor results in 56 patients injected at single levels. Of six patients having two levels injected, three had good results, two slight, and one poor. Onofrio[7] has reported good results in 80%, slight in 7%, and no improvement in 13% of 70 patients with average follow-up of seven months. Four of his failures were subjected to surgery—two demonstrating an extruded fragment, one lumbar stenosis, and in one nothing was found. His only complication was aspiration pneumonitis occurring in three patients, apparently related to the anesthetic.

The poor results obtained in compensation patients or those with a grievance is well rec-

ognized. Ford,[7] whose practice is largely weighted to this group of patients, records the lowest excellent and good rate of only 51%, slight improvement in 21%, and no improvement in 28% in more than 500 patients.

Recently, a committee of the American Academy of Orthopedic Surgeons[16] reviewed 7,507 patients treated with Discase with an average follow-up of 20 months. Of 3,998 with clear-cut neurologic deficit, 70% had excellent-to-good results, 16% fair results, and 14% with no improvement. In 3,657 patients without neurologic deficit, only 50% had good-to-excellent improvement, and 50% with slight-to-no improvement. Discase injection following previous surgery was performed in 1,120 patients with 55% showing marked improvement, 19% slight, and 26% with no improvements. Surgical treatment following failure of chymopapain resulted in marked improvement in 40%, slight improvement in 30%, no improvement in 30%. Patient age, level of injection, and amount injected appeared to have no influence on the outcome. Their conclusion was that Discase was safe and effective therapy for disc disease by experienced operators, and they recommended the release of the drug.

Overall complication rate has been carefully documented in the Travenol records.[7] Allergic response occurs in about 1.3% of patients injected. Major immediate anaphylactic reaction occurred in 13 patients (.13%), moderate and mild immediate reaction in 69 patients (.69%). Delayed mild reactions (urticaria, rash, pruritis) occurred seven to ten days after injection in 45 patients (.45%).

Two cases of death arising from early immediate anaphylactic reaction have occurred in the same institution. One case of paraplegia at T10 has been reported;[16] however, it is obscure whether a combination of blood and Pantopaque during myelography or chymopapain was responsible. McNab[17] has reported four cases of transverse myelitis following myelography over a 20-year period at the University of Toronto. He concludes that in view of the absence of neurotoxicity of chymopapain, it is more likely that the case of paraplegia following Discase was due to preceding myelography.

Discitis[7] has occurred in 18 cases diagnosed by x-ray. Because of the minimal symptoms, and failure to culture organisms, it has been assumed to be a chemical reaction. One frank disc space abscess occurred in one patient who died two months after injection; however autopsy revealed acute bacterial endocarditis with multiple embolic infarcts in the kidney and spleen.

There have been other complications reported, apparently etiologically unrelated to the injection: thrombophlebitis (10), pulmonary embolus (11), cardiovascular (9). Probably related to the injection are: temporary urinary retention, paralytic ileus, and headaches, present for variable short periods following injection.

We have not injected different enzymes or other drugs into the intervertebral space. Others have injected steroids intradiscally and epidurally,[18] as well as collagenase[19] intradiscally. It is difficult to imagine how a substance specific in its action against collagen can be effective against the nucleus pulposus. As well, potentially damaging effects against all neighboring structures consisting of a collagen may occur, e.g., annulus, dura, blood vessels, anterior and posterior longitudinal ligaments.

Discase has proven to be economical. The average hospital stay is six days for an injection and 12 days for surgery; and time taken to return to full work after Discase injection is 66 days and 202 days following surgical discectomy in one series.[21] This seems excessively long; however, the ratio of 1:3.4 days missed comparing Discase to surgery would be approximately similar to our experience.

Early evaluation suggests that the early recognition and proper treatment of anaphylaxis[22] poses a minimal problem, and that results following injection are as impressive as surgical methods in carefully-chosen patients.

Should such encouraging results continue, chymopapain may be as important a contribution as that of Mixter and Barr with even more far-reaching effects since it may herald in a new era of treating various diseases by dissolving enzymes.

Summary

Chymopapain is currently undergoing extensive investigation in the treatment for lumbar disc disease. Criteria for entry into the series—previous results, possible modes of action, complications, and pharmacology—are discussed.

Personal experience with 33 patients and collective results of nearly 10,000 patients are discussed.

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Cardiac Valve Replacement—Recent Experiences and Results

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Three hundred and eighty-three patients underwent cardiac valve replacement between January 1968 and June 1973. One hundred and fifty patients were operated upon in the first two and one-half years and 233 in the latter period. At the present time, the in-hospital mortality for valve replacement is about 5% and the late mortality 1-3 years later is also about 5%. Almost all of the patients will improve at least one functional class in the post-operative period.

REPLACEMENT of one or more of the valves of the heart has become a common operation, and the experience at Louisville has been reported previously.[1] Since that period, newer techniques have evolved and a review of the experiences in the period of 1971 to 1973 inclusive has been prepared for a study of our more recent experiences and for comparison with the previous results. As was expected, the operative mortality decreased in the second period to a level that is comparable with any center in the country. In addition, a cloth-covered artificial valve was tried and the results obtained with this valve were compared with those with the previous prosthesis.

Case Material

During this period 233 patients underwent cardiac valve replacement including 95 aortic valves, 121 mitral valves, one tricuspid valve, and 16 double valves. In the aortic valve replacements there were 68 males and 27 females, and in the mitral valves 29 males and 79 females. In all cases the patients were functional Class III or IV with the exception of three patients whose symptoms were very mild, but who underwent aortic valve replacement because the gradient exceeded 100 mm/Hg, and one who underwent mitral replacement for recurrent embolism. Therefore, all but these four patients had symptoms that either interfered with their normal activities, kept them confined to bed, or resulted in repeated hospital admissions for heart failure. The age of the patients varied from 17 to 69 years, the mode being in the 40- to 49-year-old age group, and 60% of the patients being between 40 and 60 years of age at the time of operation.

Technique

Most of the patients underwent cardiac catheterization before operation except when the diagnosis was obvious and the exigencies of time, cost, or a heavy catheterization schedule prevented it. Thus, patients with pure aortic insufficiency, gross mitral insufficiency, isolated mitral stenosis, or mixed mitral valve lesions without obvious aortic valve disease could be operated upon without cardiac catheterization on the basis of clinical examination only. If there was a question of associated coronary artery disease or if the patient appeared to have pure aortic stenosis, cardiac catheterization was always performed.

The patients were usually admitted to the hospital two to three days before operation, at which time digitalis and diuretic therapy were discontinued. A potassium supplement was started orally to replace depleted stores caused by prior vigorous diuretic therapy. Skin preparation consisted of a daily bath with hexachlorophene soap, and oral methicillin therapy was started the day before operation. IPPB therapy was given for two days before operation so that the patient could become familiar with the machine.

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The operations were all performed under general anesthesia, the choice of agent being left to the individual anesthesiologist. At no time did we find that it was necessary to start with local anesthesia and partial bypass through the femoral vessels despite the very precarious condition of many of the patients. Drugs that depressed myocardial function were avoided as much as possible until after cardiac bypass had been instituted, and in this series cardiac arrest did not occur in any of the patients in the period after his arrival in the operating room and before the bypass was started. The electrocardiogram, electroencephalogram, urinary output, rectal and esophageal temperature, central venous pressure, and peripheral arterial pressure monitored by blood pressure cuff, recently supplemented by a Doppler pulse monitor over the radial artery, have been the only physiological parameters that have been monitored. Arterial blood gases have not been checked routinely, although recently when we have been trying a new type of oxygenator, they have been recorded in the middle of the run and at its termination.

The usual incision has been a midline sternotomy, but if only mitral replacement is contemplated a right thoracotomy has been preferred, particularly if the left atrium is small or if the patient is a female since the cosmetic result from the thoracotomy incision is better. The superior and inferior vena cava have been cannulated through the right atrium, and arterial return has been through the femoral artery in almost all the cases except where severe terminal aortic or iliac artery disease has been present, when the ascending aorta has been cannulated.

The Travenol disposable bubble oxygenator was used in all cases, primed with one-half Ringer lactate solution and one-half 5% dextrose and water. Blood was not added to the heart-lung machine in any of the cases except in the rare occasion when excessive blood loss occurred during operation. Carbon dioxide has not been added to the oxygen line in the oxygenator, and bicarbonate has been added to the oxygenator at thirty-minute intervals during the run. As the bypass was being discontinued, 0.5 to 1.0 gm of calcium chloride was added to the oxygenator. After bypass was discontinued and the venous catheters had been removed, fluid and blood remaining in the oxygenator were slowly returned to the patient while hemostasis was being secured and the operative incisions closed.

During aortic valve replacement the left coronary artery was cannulated and perfused at 150 to 250 cc per minute depending on the size of the heart and the response of the heart to the perfusion. During mitral valve replacement the aorta was cross-clamped to give anoxic cardioplegia, the clamp being released once for three to five minutes if the valve replacement had not been completed in 25 minutes.

The valves employed have been only the Starr-Edwards type. During this period of time the cloth-covered aortic and mitral valves (Models 2320 and 6320) were tried in 161 patients, but since January 1973 we have returned to the silastic ball valve with metal cage (Models 1260 and 6120).

In the post-operative period the patient is returned first to the recovery room and then to the intensive care unit after five or six hours. Ventilation is continued through the endotracheal tube connected to a positive-pressure ventilator until the patient is fully awake and fighting the tube or is able to support respiration on his own. This is gauged by taking him off the ventilator and observing the respiratory rate for an hour: if the patient is breathing easily, the vital signs are stable, and the respiratory rate is 25/min or less, the endotracheal tube is removed. If the patient's cardiac function has been very poor preoperatively, or if the pulmonary artery pressure was equal to systemic, ventilation is continued for 12 to 18 hours after operation before an attempt is made to try him off the ventilator. In occasional very severe cases the assisted respiration has to be continued for 48 to 72 hours, but tracheotomy is rarely required. After the endotracheal tube has been removed, IPPB therapy is given at regular intervals for five to seven days, not because of its effectiveness in preventing atelectasis, but because it helps the patient to get the chest wall moving and may stimulate coughing.

In the recovery room and intensive care unit the central venous pressure, cuff blood pressure, electrocardiogram, urinary output, chest tube drainage, respiratory rate, and rectal

temperature are recorded. Intravenous fluid therapy has been dextrose and water with 40 to 80 milliequivalents of potassium chloride added to each 1,000 cc. In most cases, a slow isoproterenol drip (0.4 mg in 500 cc 5% dextrose and water) is used to stimulate myocardial contractions. If frequent premature ventricular contractions occur, a lidocaine bolus is administered and if they persist a continuous lidocaine drip (1 to 4 mg per minute) is employed. If necessary, the isoproterenol is discontinued and further potassium may be added to the intravenous fluids. Digitalis therapy is not restarted until the day after operation, unless a rapid ventricular rate occurs that is not caused by blood volume depletion. Blood transfusion is given as indicated by the blood pressure, CVP, urinary output, volume of the peripheral pulse, and appearance of the skin circulation. Antibiotic therapy at the present time consists of sodium oxacillin intravenously or orally, 500 mg every six hours for seven days and streptomycin 1.0 gm IM every 12 hours for 48 hours.

Results

The operative mortality for the first period (1968 to 1970) and the second period (1971 to 1973) are shown in Table I. In each series, a patient is classified as an operative death if he died at any time during the same hospital stay during which the valve replacement was performed. The in-hospital mortality for mitral valve replacement in the recent series was 5.0%, for aortic valves 3.2%, and for double valves 12.5%. This is an improvement over the previous mortality rate reported in the first series of 9.4% for mitral valve replacements, 11.6% for aortic valves and 36.0% for double valves. The average age of the patients who died in hospital was 59 years, ranging from 42 to 69 years. The late mortality rate (one to three years after operation) in the last series was 4.0% for survivors of mitral valve replacement, 4.3% for aortic valves, and 14.3% for double valves.

The functional classification of the patients one to three years after operation was compared to the pre-operative status (Table II). In general terms, 80% of the patients were Class III preoperatively and 20% Class IV, whereas after operation 75% of the patients were Class II and the remainder were equally divided between Class I and Class III. These are the same results as were obtained in the original series that ran from 1968 to 1970.

Table III shows the average time on the pump, the blood use during the hospital stay, and the number of days in hospital after operation for aortic, mitral, and double valve replacement. The time on the pump varied considerably depending on whether the operative procedure was done by a staff member or a trainee under his supervision. Thus the time varied from 38 to 110 minutes for aortic valve replacement, 27 to 76 minutes for mitral valve replacement, and 58 to 105 minutes for double valve replacement. In general, mitral valve replacements took about 45 minutes, aortic 60 minutes, and double valve replacements 80 minutes.

The use of hemodilution with the return of all the pump fluid to the patient after operation greatly reduced the blood requirement and the average blood transfusion during the entire hospital stay was 1.3 units for mitral replacements, 2.2 units for aortics, and 3.5 units for double valve replacements. At the present time, we ordinarily prepare three units of blood for single valve replacements and five units

TABLE I
MORTALITY RATE FOR VALVE REPLACEMENT

	1968-1970			1971-1973			1968-1973		
		Deaths			Deaths			Deaths	
	No.	Hosp.	Late	No.	Hosp.	Late	No.	Hosp.	Late
Aortic	52	5	3	95	3	4	147	8	7
Mitral	69	6	4	121	6	5	190	12	9
Aortic & mitral	15	6	1	9	2	2	24	8	3
Mitral & tricuspid	12	3	0	7	0	0	19	3	0
Aortic & tricuspid	1	0	0	0	0	0	1	0	0
Tricuspid	1	1	0	1	1	0	2	2	0
TOTAL	150	21 (14%)	8 (5%)	233	12 (5%)	11 (5%)	383	33 (9%)	19 (5%)

TABLE II
CARDIAC FUNCTIONAL CLASSIFICATION

			I	II	III	IV
Aortic	Before	(95)	—	3	72	20
	After	(88)	19	59	10	—
Mitral	Before	(121)	—	1	91	29
	After	(110)	15	76	18	1
Double	Before	(16)	—	—	7	9
	After	(12)	—	9	2	1

TABLE III
VALVE REPLACEMENT

	Mitral	Aortic	Double
Pump Time (min)			
Average	43	61	80
Range	27-76	38-110	58-105
Blood Use (units)			
Average	1.3	2.2	3.5
Range	0-6	0-14*	1-8
Hospital Days (survivors)			
Average	13.3	14.4	15.6
Range	8-37	9-35	11-22

*14 units in a patient with pre-operative bleeding diathesis

for double valve replacements preoperatively. As in the past, many of the patients received no blood transfusion at any time during the hospitalization.

Table III also indicates that almost all the patients stayed in hospital about two weeks before and after operation, ranging from eight to 37 days at the longest.

Wound infection requiring local debridement and drainage occurred in five patients, three of them during a period when major construction changes were being performed in the operating rooms. Four of these patients survived, only one requiring rewiring of the sternum. There were three other cases of sternal dehiscence that required resuturing, and in each of these the patient was either extremely weak or had a major neurological defect that led to extreme debility. All of these patients survived. Re-exploration of the mediastinum for bleeding was also performed in five cases, none of whom died or developed a wound infection.

Major complications of the perfusion occurred in three cases, one of which was an instance where the arterial line of the pump ruptured. Despite the horrendous nature of the problem, the lines were reconnected and cleared of air, the bypass reinstituted, the patient survived, and three years after operation has only mild weakness of one leg. In two other cases, dissection of the aorta occurred, and the cannula had to be removed from the femoral artery and reinserted into the ascending aorta, both of these patients surviving. Fortunately, dissection has not occurred in the last two years.

Tracheotomy for respiratory assistance was never performed in the operating room. It was only required five times (2% of cases), and was carried out on the third to fifth day after operation when it became evident that prolonged support would be required. Up to this point, the endotracheal tube that had been inserted by the anesthesiologist was used as the airway. The tracheotomy was performed under local anesthesia in the intensive care unit, and all five patients survived despite the critical condition of each.

The ICU syndrome consisting of anxiety, confusion, disorientation, and at times hallucinations has been seen after operation, particularly in critically ill patients who remain in the ICU more than three or four days. Accompanying this is usually a fever of 102° or more. The situation has been treated by reduction in the frequency of vital sign checks and medical treatments, heavy sedation of the patient, and as soon as possible transferring him to a private room on the ward. With 24 hours' rest, it has been remarkable to see the improvement in the patient's mental status and the immediate disappearance of the fever. Another psychological disturbance has occurred quite frequently five to seven days after operation, usually taking the form of depression, weakness, and lethargy. Time, encouragement, and reassurance of the relatives have been the only forms of therapy employed, since this phase usually lasts only two to three days. A permanent psychosis in the form of chronic anxiety or depression has been seen in only two patients, in one of whom this tendency was evident preoperatively.

In the six and one-half years involved in this study plus the follow-up period to the present, subacute bacterial endocarditis has been observed seven times, an incidence of 1.8%. One occurred about two months after operation in a diabetic who had been operated upon for aortic insufficiency as a result of bacterial endocarditis; two occurred as a result of serious mouth infections caused by dental

caries; two resulted from GU tract infections; and two were staphylococcus aureus infections for which no cause was found. Thus five of the seven had a predisposing factor that was not directly related to the operative procedure or the artificial valve, and could have occurred on the patient's own deformed valve even if valve replacement had not been performed. At the present time, we are most concerned about dental caries and dental extraction, as well as repeated urinary tract infections especially associated with prostatic enlargement, urethral catheterization, or transurethral instrumentation. We would like to have these factors cleared up before the valve replacement is undertaken, but unfortunately the patient's poor general condition has made the oral surgeon or urologist refuse to perform the necessary surgery until after the valve replacement has been successfully completed.

Infectious hepatitis has been seen after operation in five patients, and naturally the blood used during operation was blamed for this occurrence. Fortunately, none of these patients died or has detectable residual liver damage. However, in four of these patients the patient received no transfusion at any time during operation or the post-operative period, and the source of the hepatitis has not been identified. Of course, if even a single transfusion had been employed, the blame would have been laid erroneously on the blood. At the present time all blood employed for open heart surgery comes from voluntary donors and is screened for the hepatitis virus by the radioimmunoassay test.

Hemolytic anemia of a degree that is sufficient to require continuous iron therapy or intermittent transfusion has been observed in only four patients. The diagnosis of hemolysis as a cause for the anemia is based upon the serum bilirubin, reticulocyte count, LDH, iron deficiency anemia, and serum haptoglobulin level. In all four of these, the valve employed was the cloth-covered prosthesis, three of them being aortic valves and one a mitral valve. Only one of the patients has a clinically detectable leak around or through the prosthesis, and this appears to be quite mild. We believe that the hemolysis in most cases is due to the trauma of the red cells caused by the metal ball and also to fraying of the cloth on the struts caused by the ball striking the cloth during opening of the valve. In none of the cases has valve replacement been required, and only one receives intermittent transfusion therapy. The confinement of this complication to the cloth-covered valves was one of the factors that led to discontinuance of their use.

A post-cardiotomy syndrome consisting of fever, heart failure, pleural and pericardial effusion, and lymphocytosis has been extremely infrequent. Only one patient has been placed on steroid therapy for this condition, although milder forms have probably been seen but have been treated with aspirin, therapy for the heart failure, and observation. If the fever is associated with a leukocytosis, a search for wound infection, atelectasis or pneumonia, GU tract infection, phlebitis, or SBE is instituted. On the other hand, if the total white blood count has been in the normal range, we have usually given only symptomatic therapy until more definite evidence of either an infection or the post-cardiotomy syndrome has occurred.

Neurological complications that were evident immediately after operation have steadily decreased in frequency despite the high incidence of thrombi in the left atrium or extensive calcification of the mitral or aortic valve. In this last three-year period nine patients had neurological deficits in the immediate post-operative period, six being mitral valve replacements and three aortic valve replacements. None of these patients died. In two of them an accident occurred in the operating room, one being a dissection of the aorta, and the second being the case in which the arterial line came apart during the perfusion. One patient was in shock and comatose when he came to the operating room, so the right hemiparesis may have been present before the operative procedure was undertaken. Another patient had a heavily calcified aortic valve so a piece of calcium may have been lost, and in a fifth patient an extensive left atrial thrombus was present which had to be removed, and a piece of this may have been lost in the pulmonary veins. A sixth patient underwent a coronary bypass graft at the same time as the mitral valve replacement, indicating that small-vessel arteriosclerosis was present in his body, and cerebral arteriosclerosis may have contributed to his right hemiparesis. Three other patients had transient paresis and

aphasia, from which they recovered completely.

Embolism after the patient has been discharged from hospital has occurred with the same frequency in the cloth-covered valves as in the previous silastic ball valves. An attempt has been made to correlate this with the presence of atrial fibrillation, aortic versus mitral valve replacement, the use or discontinuance of anticoagulant therapy, and the presence of a clot in the left atrium at the time of mitral valve replacement. None of these factors appeared to be definitely significant, although one would expect a higher incidence in a patient who underwent mitral valve replacement, who had a left atrial thrombus present at the time of operation, and in whom atrial fibrillation continued after operation. Other reports indicate that discontinuing the anticoagulant therapy after one to two years results in a higher incidence of cerebral embolism in the first month or two thereafter, but we have not had enough experience to be able to make a definitive statement. We try to maintain the prothrombin time about twice the control level for an indefinite period in all patients who have undergone valve replacement, and whenever possible the patient is cardioverted to a normal sinus rhythm about three months after operation. The incidence of cerebral vascular accidents one to three years after operation has been 4% in aortic valve replacements and 7% in mitral valve replacements.

The causes of death in hospital at the time of valve replacement were low-cardiac output in six patients, an intramyocardial hematoma due to a technical error in one patient, septic shock due to a GU tract infection in one, myocardial infarction in one, and stroke in one. Of the 11 late deaths after valve replacement in this series, five were due to unrelated causes (two carcinoma, two cardiomyopathy, and one stroke), five were directly related to the presence of the prosthetic valve (two re-operations, one mitral valve dysfunction, one excessive anticoagulant therapy, and one re-operation for paravalvular leak), and one was unexplained.

In a two-year period that was almost entirely confined to the second series, cloth-covered Starr-Edwards valves were placed in 161 patients, 98 mitral valves and 77 aortic valves being included. The operative and in-hospital mortality for these valves was the same as for the standard silastic ball valves as was the late mortality. However, in this period 10 patients required re-operation for malfunction of 12 prostheses, five aortic valves between six and 17 months after operation and seven mitral valves between five and 24 months. There were two deaths in these 10 re-operated patients, both in isolated mitral valve replacements. In addition, four other probable cases of mitral valve dysfunction were noted, one of whom died of acute pulmonary edema, one who had repeated cardiac arrhythmias but has refused catheterization, one of gross mitral insufficiency and angina who refused re-operation, and one with a massive stroke and evidence of intermittent ball valve dysfunction in whom the echocardiogram suggested the presence of a thrombus surrounding the ball valve.

The factors involved in dysfunction of the cloth-covered valves as discovered at re-operation included cloth wear of the struts of the valve, cloth wear over the seat of the valve including displacement of the cloth over the studs, small amounts of thrombus at the base of the struts of the mitral prostheses, and thrombus on the seat of the aortic or mitral valve that caused incomplete closure and leakage of the valve. In addition, the noise of the cloth-covered valves with a metal ball reached an unsatisfactory level in many patients, and was disturbing to at least the surgeons who were following the patients.

Thus of the 161 original patients who underwent implantation of one or more cloth-covered valves, 151 were discharged after the first operation and valve dysfunction was proved or suspected in 14 patients (8.7%) leading to four deaths, 12 re-operations in 10 patients, and two patients who may still require operation. The incidence of valve dysfunction was much higher than with the silastic ball valves, the occurrence of post-operative embolism was about the same, and the cloth-covered valves were much noisier. Consequently, we returned to the use of the silastic ball valves in January 1973.

Discussion

The results obtained in this series are quite satisfactory and only a few comments can be made. The operative mortality is now at a level that is comparable to that obtained at any

major center doing cardiac surgery in this country. These are the result of excellent pre-operative diagnosis and preparation performed by the cardiology service, the skilled anesthesiology and operating room team that performs the procedures with a minimum of time and trauma, and a well-trained and enthusiastic intensive care unit nursing service who detect serious problems early and in many cases institute treatment before the physician can get to the scene.

The low incidence of double valve replacement in this series is the result of our conservative approach to tricuspid insufficiency that accompanies mitral valve disease. Despite the relatively frequent association of these two conditions, especially in Class IV patients, we do not replace the tricuspid valve unless the pulmonary artery pressure is low or only moderately elevated or the tricuspid valve is organically deformed or grossly dilated as determined by palpation at the time of operation. A huge right atrium with a systolic thrill and a history of recurrent ascites will also tend to make us favor tricuspid replacement. However, if there is severe mitral disease that can be markedly improved by valve replacement, and the pulmonary artery pressure approaches the systemic pressure, we seldom replace the tricuspid. We have not yet had to re-operate on a patient for tricuspid insufficiency under these conditions, but one patient has undergone tricuspid replacement for stenosis that was unrecognized at the time of the first catheterization or operation.

The minimal blood use has greatly reduced the incidence of post-operative bleeding, low-cardiac output, and acidosis and has reduced the strain on the American Red Cross. In addition, the opportunity for hepatitis is greatly reduced, and the use of a non-blood prime has allowed us to continue to operate upon Jehovah's Witnesses whenever the need arises.

Ventricular arrhythmias in the post-operative period continue to be a serious factor, but death as a result of these has almost disappeared because of the routine of discontinuing the digitalis and diuretics preoperatively, and the routine use of supplemental potassium in the pre-operative and immediate post-operative period. Once again, the alert ICU nurses have been an enormous help in this area.

The cloth-covered valve was employed for a two-year period in an attempt to reduce the incidence of peripheral embolism, which is the major complicating feature of prosthetic valve replacement. Unfortunately, the occurrence of embolism did not appear to be reduced, and the other complicating features of valve dysfunction, hemolysis, and noise led us to return to the original model of valve which has been the standard of performance by which all other types of valves have been judged. While we are looking at other models of valves, we have not yet seen convincing evidence that will lead us to change the type that we now employ.

Finally, post-operative infection continues to be a major source of concern and whenever possible dental caries, and factors that lead to recurrent GU tract infection or manipulation, should be eliminated preoperatively. If they occur in the post-operative period, heavy antibiotic therapy should precede and accompany any operative manipulation in either the oral cavity or the GU tract.

Acknowledgements

The authors wish to express their appreciation for the outstanding skill and devoted service of Mrs. Dorothy Anderson, R.T., Miss Betty Ann Potter, R.T., and Miss Polly Brown, R.N. In addition, none of the work would have been possible without the outstanding anesthesiology staff of Jewish Hospital, the smoothly-functioning operating room team under Mrs. Berneda Grass, R.N., and the ICU nurses trained by Miss Judy Ober, R.N. and Miss Carolyn Voelker, R.N.

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Rocky Mountain Spotted Fever in Kentucky

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Cincinnati, Ohio

An epidemiological picture of Rocky Mountain Spotted Fever in Kentucky is presented in terms of yearly incidence, seasonal incidence, and geographical distribution.

ROCKY Mountain Spotted Fever (RMSF) is an arthropod-borne infectious disease caused by *Rickettsia rickettsia* (Wolbach) and is the only rickettsial disease in the United States which has a significant mortality rate.[1] The infection is found in rodent, rabbit, and other wild animal reservoirs, with man being only an accidental host. The raccoon recently has been strongly indicated as the principal disease reservoir of RMSF in Kentucky's Land Between The Lakes region.[2] The primary vector of RMSF throughout the central and eastern United States is the American dog tick, *Dermacentor variabilis* (Say), which typically acquires the pathogen by feeding on the blood of an infected animal though the pathogen can also be transmitted from an infective female tick directly to its progeny (transovarian transmission). Infective ticks must feed for four or more hours on a human in order for transmission of the disease to take place.

The disease is characterized by a rash which usually appears after two to six days, though the incubation period may be longer in mild cases. The rash typically begins on the ankles and wrists and within hours spreads to the rest of the body, including the palms and soles. Other clinical features include high fever, headache, myalgia, progressive hypotension, mental confusion, and photophobia. Hepatosplenomegaly is infrequent.

The current fatality rate is approximately 6%, often due to thrombocytopenia or toxemia, and is usually linked to a delayed diagnosis.[3] A recent study in Memphis[4] discovered an average delay of 10.6 days between the onset of the disease symptoms and the initiation of chemotherapy. Chemotherapy involves the use of chloramphenicol or tetracyclines.

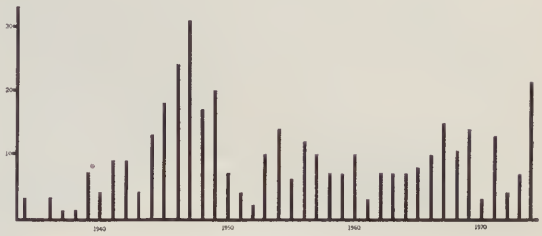


FIGURE 1 Number of reported cases of Rocky Mountain Spotted Fever in Kentucky, 1934-1974, inclusive.

Yearly Incidence. The reported annual incidence[5] of RMSF in Kentucky is illustrated in Figure 1. The peak year was 1947 with a total of 31 cases being diagnosed and reported, but the 1974 incidence of 21 cases suggests that this 1947 incidence could yet be exceeded. Although the yearly incidence has widely fluctuated in Kentucky since 1969, the incidence of RMSF for the whole nation is currently undergoing a marked increase with more than 500 cases being reported in 1972 alone.[6] Much of this marked increase has been contributed by three of Kentucky's neighboring states: namely, Tennessee, Virginia and Ohio.

Monthly Incidence. The monthly distribution of Kentucky cases reported from 1964 through 1973 is presented in Table 1 and is similar to that recently reported for the Memphis area[4] and the nation.[3] The complete absence of cases during the winter months is typical of arthropod-borne diseases endemic to temperate

TABLE I

	J	F	M	A	M	J	J	A	S	O	N	D
1964	—	—	—	—	—	3	2	2	—	—	—	—
1965	—	—	—	—	—	2	—	3	2	—	—	—
1966	—	—	—	—	—	1	1	5	2	1	—	—
1967	—	—	—	—	2	5	3	4	1	—	—	—
1968	—	—	—	1	—	1	5	3	1	—	—	—
1969	—	—	—	—	2	4	—	3	5	—	—	—
1970	—	—	—	—	—	—	2	1	—	—	—	—
1971	—	—	—	—	3	1	—	6	3	—	—	—
1972	—	—	—	—	—	—	1	3	—	—	—	—
1973	—	—	—	—	1	2	1	2	—	1	—	—
Total	0	0	0	1	8	19	15	32	14	2	0	0

Monthly incidence of Rocky Mountain Spotted Fever in Kentucky, 1964-1973, inclusive

*Assistant Director/Northern Kentucky, Health Planning Association of the Central Ohio River Valley, Cincinnati, Ohio

Paper received at KMA: 7-9-74. Revised: 3-27-75



FIGURE 2 Distribution by county of reported cases of Rocky Mountain Spotted Fever in Kentucky, 1969-1973, inclusive.

regions, for low winter temperatures prevent the development of vector populations and also reduce human activity outdoors.

Geographical Distribution. Figure 2 is a map showing a geographical distribution for 41 reported RMSF cases in Kentucky. There is an expected dearth of cases reported from the highly populated north-central and central regions of the Commonwealth. In other areas the urban environment presumably has not yet infringed to the extent that reservoir and vector populations are significantly reduced.

Summary. The picture of RMSF in Kentucky is a classical one with a summer predominance of reported cases and a primarily rural distribution. Because of an increasing incidence of reported cases in the nation, in neighboring states, and in Kentucky itself during 1974, Kentucky's primary-care physicians should remain alert for new cases of this disease.[7,8]

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7. The author gratefully acknowledges the cooperation of Dr. Donald Thurber, Director, Office of Communicable Disease, in the preparation of this paper.
8. This paper is dedicated to Dr. Fred Knapp, Professor of Medical/Veterinary Entomology, University of Kentucky, in gratitude for his patient instruction.

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Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

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CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

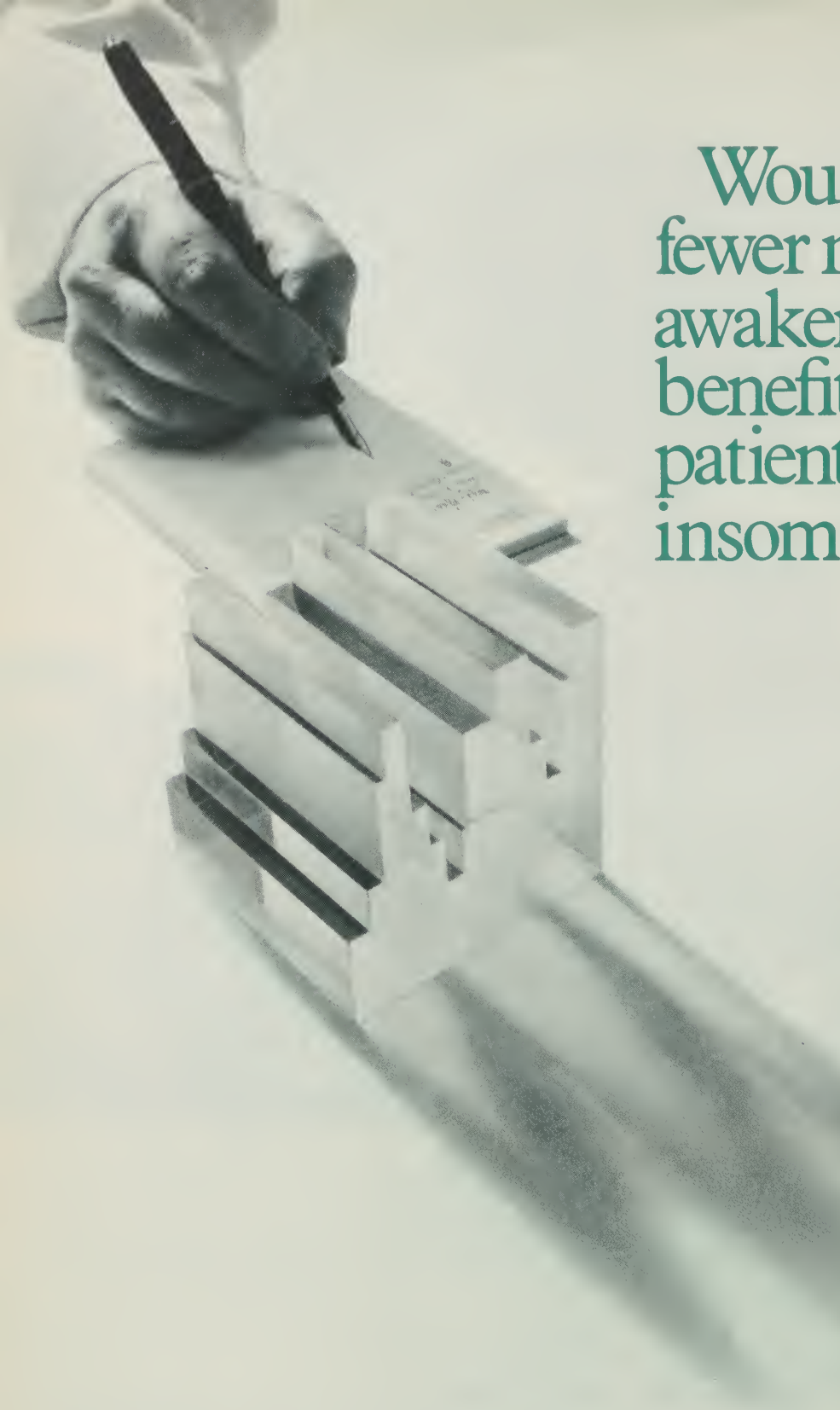
Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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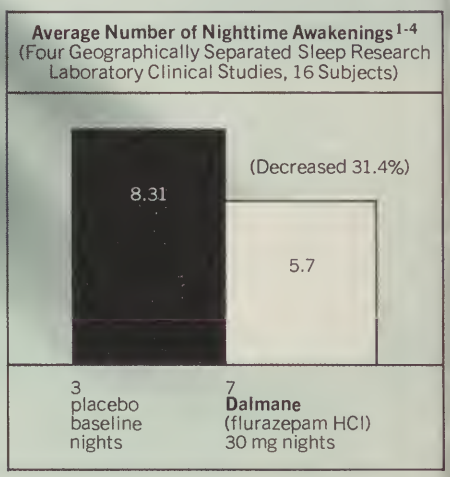
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4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
5. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

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Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

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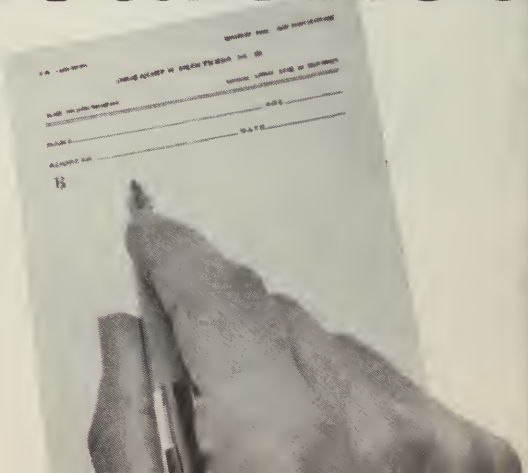
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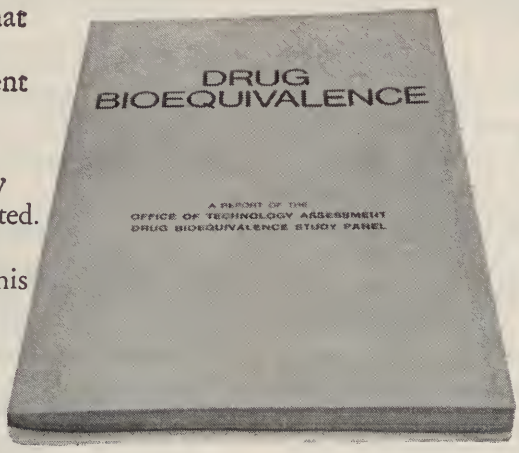
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Here are a few definitive statements in the O.T.A. report:

"...the problem of bioinequivalency in chemically equivalent products is a real one. Since the studies in which lack of bioequivalence was demonstrated involved marketed products that met current compendial standards, these documented instances constitute unequivocal evidence that neither the present standards for testing the finished product nor the specifications for materials, manufacturing process, and controls are adequate to ensure that ostensibly equivalent drug products are, in fact, equivalent in bioavailability.



"While these therapeutic failures resulting from problems of bioavailability were recognized and well documented, it is entirely possible that other therapeutic failures and/or instances of toxicity that had a similar basis have escaped attention."

The Pharmaceutical Manufacturers Association supports federal legislative amendments that would require manufacturers of duplicate prescription pharmaceutical products, subject to new drug procedures, to document:

(a) chemical equivalence; and

(b) biological equivalence, where bioavailability test methods have been validated as a reliable means of assuring clinical equivalence; or

(c) where such validation is not possible, therapeutic equivalence.

In addition, the PMA supports federal legislation that would require certification of all manufacturers of prescription products before they could start in business, annual inspections and certification thereafter, and strict adherence to FDA regulations on good manufacturing practices.

The overall quality of the United States drug supply is excellent. But only a total quality assurance program, envisaged in these and other policy positions adopted by the PMA Board of Directors in 1974, can bring about acceptable levels of performance by all prescription drug manufacturers and thereby assure the integrity of your prescription...

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*Copies of the complete report on Drug Bioequivalence may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

protecting the integrity of your prescription

CONTINUING MEDICAL EDUCATION

Mandatory Continuing Medical Education

AT its meeting on April 10, 1975, the Board of Trustees approved recommendations made by the Medical Education Committee on participation in continuing medical education. The recommendations, to be referred to the Board of Medical Licensure, were:

That the Licensure Board require individual accomplishment of CME requirements by specialty as listed in the 1973 final report of the Education Committee to the House of Delegates.

That other CME accomplishments should serve in lieu of this program and these other accomplishments should be identified by the Licensure Board.

That KMA and individual specialty groups be allowed to routinely modify the specialty requirements and comment on program policy.

That regulations requiring participation by individual physicians be put into effect as of July 1, 1975, and the first qualification period should end June 30, 1978.

Resolution A, passed by the 1974 session of the House of Delegates, adopted the concept of mandatory participation in CME and provided for specialty group input into developing requirements. Through the KMA Interspecialty Council, specialty groups were asked to report group-supported requirements and the following societies have so far advised of revisions: Anesthesiologists, Dermatologists, Family Practitioners, the Occupational Medical Association, Orthopedists and Pathologists.

CME requirements for other groups were modified from information gathered by the Medical Education Committee and appeared in their 1973 final report to the House.

For the information of the membership these requirements are as follows:

General Requirements

2 credits for each hour of attendance at local, state, regional and national specialty society scientific meetings in appropriate specialty.

2 credits for each hour of participation in specialty postgraduate courses sponsored by a medical school or other educational organizations generally recognized by appropriate specialty as qualified to conduct meaningful courses in that specialty.

2 credits for each hour of attendance at AMA scientific programs sponsored by or relating to appropriate specialty.

1 credit for each hour of attendance at hospital staff meetings and hospital scientific programs.

1 credit for each hour of participation in journal clubs, journal reading, or audio-digest. Limit 60 credits per three years.

1 credit for each hour of attendance at component society or KMA scientific programs.

1 credit for each hour of attendance at scientific programs of other generally recognized medical organizations not necessarily relating to specialty.

10 credits for each hour of formal or informal teaching to medical or allied medical personnel. Limit 90 credits per three year period.

150 credits per triennium required.

Anesthesiology Requirements

Under development by the Kentucky Society of Anesthesiologists.

Dermatology Requirements

Under development by the Kentucky Dermatologic Society.

Family Practice Requirements

Same as the requirements of the Kentucky Academy of Family Physicians.

Internal Medicine Requirements

2 credits for each hour of attendance at national and regional medical meetings.

Because of the general interest in continuing medical education and the increasing involvement of KMA in CME activities, the Medical Education Committee has felt that a periodic report on its activities would be helpful to the membership. This page will not appear routinely, but only as necessary. For additional information on any of the items that appear, please contact the Headquarters Office.

2 credits for each hour of attendance at Kentucky ACP Annual Meeting.

2 credits for each hour of attendance at Kentucky ACP Monthly scientific meetings.

2 credits for each hour of attendance at postgraduate education courses in internal medicine.

2 credits for each hour of attendance at hospital medical department conferences.

2 credits for each hour of making a presentation before a hospital medical staff.

2 credits for each hour of attendance at a medical school department conference.

10 credits for presenting or publishing a scientific paper.

1 credit for each hour of attendance at state medical association meetings.

1 credit for each hour of attendance at component medical society meetings.

1 credit for each hour of attendance at local medical meetings.

1 credit for each hour of journal clubs, journal reading, and audio-digest tapes. Maximum of 150 credits per three-year period.

1 credit for each hour of general hospital staff meetings.

1 credit for each hour of preceptorship activities at a hospital or a medical school.

300 credits per triennium required.

Obstetrics and Gynecology Requirements

2 credits for each hour of attendance at national and regional medical organizations.

2 credits for each hour of attendance at Kentucky Obstetrical and Gynecologic Society.

2 credits for each hour of attendance at postgraduate courses in obstetrics and gynecology.

2 credits for each hour of attendance at hospital obstetrics and gynecological department conferences.

2 credits for each hour of attendance at medical school department conferences.

2 credits for each hour of attendance at journal clubs.

2 credits for each hour of making a formal presentation before a hospital medical staff.

10 credits for presenting or publishing a scientific paper.

1 credit for each hour of attendance at state medical association meetings.

1 credit for each hour of attendance at component medical society meetings.

1 credit for each hour of attendance at other local medical meetings.

1 credit for each hour of journal reading and audio-digest tapes.

1 credit for each hour of preceptorship activities at hospital and medical school.

1 credit for each hour of attendance at general hospital staff meetings.

300 credits per triennium period.

Occupational Medicine Requirements

Category 1: CME Activities with Accredited Sponsorship (60 hours required). No limit.

Category 2: CME Activities with Non-accredited Sponsorship. 45 hours limit.

Category 3: Medical Teaching. 45 hours limit.

Category 4: Papers, Publications, Books, and Exhibits. 40 hours limit.

Category 5: Non-supervised individual CME Activities. 45 hours limit.

Category 6: Other Meritorious Learning Experiences. 45 hours limit.

Credit in all categories is on an hour-for-hour basis, except in Category 4.

150 credits per triennium period.

Ophthalmology Requirements

7 credits for each full day of attendance at an accepted meeting. The following meetings are considered acceptable:

Kentucky EENT Society
American Academy of Otolaryngology and Ophthalmology
American College of Surgeons
American Medical Association
Others

For each of the following staff meetings, the participants should receive 2 credits:

University of Kentucky and University of Louisville Medical School Ophthalmology Department
Others

Lectures, grand rounds, and special teaching sessions to interns and residents, one credit for each hour spent teaching. One credit should be given for each hospital staff meeting where a scientific program is presented. Journal club should be awarded one credit for each hour of participation.

Audio-digest tapes have become extremely valuable teaching aids. It was felt that 72 credits per three-year period should be awarded to those who listened to the program conscientiously.

Preparation of a lecture for a staff meeting, a special club such as the Lions Club, Rotary Club, etc., should award two credits per each presentation.

Other recognized postgraduate courses should be given the same amount of consideration as those which have been named (7 credits per day).

150 credits per triennium period required.

Orthopedic Requirements

Under development by the Kentucky Orthopaedic Society.

Otolaryngology Requirements

Intensive courses, all day and evening—10 credits per day.

American Academy of Ophthalmology and Otolaryngology, National Triological, Otological, and other national meetings which run all day—8 credits per day.

American Medical Association, 8-hour day—8 credits per day.

Kentucky EENT Society meetings—? credits.

Local hospital staff meetings, I hour sessions—1 credit per hour. Includes sections on eye, ear, nose

and throat, general staff meetings, tumor board, and any other recognized departments of the staff.

Preparation for and taking of the American Board examinations in Otolaryngology—50 credits.

Preparation and/or presentation of a paper before an Otolaryngological Society, or publication of a paper in a recognized journal—10 credits.

Miscellaneous credits: tapes, accredited correspondence courses, local hospital and medical society meetings—1 credit for each. Maximum 75 miscellaneous credits per three-year period.

150 credits per triennium required.

Pathology Requirements

Joint ASCP-CAP Pathology Continuing Medical Education Certificate requirements.

Pediatric Requirements

2 credits per hour of attendance at roundtables and seminars at the Annual Meeting of the American Academy of Pediatrics.

2 credits per each hour of attendance at postgraduate courses of the American Academy of Pediatrics or of medical schools on pediatric topics.

2 credits for each hour of attendance at postgraduate courses of other specialties of pediatrics.

2 credits for each hour of attendance at hospital pediatric staff meetings.

2 credits for each hour of attendance at preceptorship teaching of house officers, interns and students. Limit of 60 credits per three-year period.

10 credits for presentation of a paper at hospital medical/pediatric meeting.

1 credit for each hour of attendance at general or specialty sessions of the meetings of the:

American Academy of Pediatrics
American Pediatric Society
Association of Ambulatory Pediatric Services
International Congress of Pediatric
Society for Pediatric Research

1 credit for each hour of attendance at regional pediatric meetings.

1 credit for each hour of local pediatric society meetings.

1 credit for each hour of attendance at Committee meetings of the American Academy of Pediatrics and other national pediatric societies.

1 credit for each hour of attendance at general hospital staff meetings.

1 credit for each hour of self-instruction such as audio-digest tapes, and reading of reputable journals.

5 credits to be given for the taking of the American Academy of Pediatrics self-evaluation course.

10 credits for the publication of a scientific paper in a reputable journal.

300 credits per triennium period.

Preventive Medicine Requirements

2 credits for each hour of attendance at American Public Health Association meetings.

2 credits for each hour of attendance at branch meetings.

2 credits for each hour of attendance at American Medical Association meetings.

2 credits for each hour of attendance at specialty scientific sessions of any specific specialty branch of medicine.

2 credits for each hour of attendance at the official Conference of Local Health Officers.

2 credits for each hour of attendance at postgraduate education courses.

2 credits for each hour of attendance at hospital department conferences.

Publication of a paper or article in a scientific journal, or presentation of a paper at county society level or higher. Limit 10 credits per publication or presentation.

2 credits for each hour of attendance at state medical association meetings.

2 credits for each hour of attendance at state society committee meetings.

2 credits for each hour of attendance at the Kentucky Association of Public Health Physicians meetings.

1 credit for each hour of attendance at meetings of voluntary health associations.

1 credit for each hour of attendance at hospital staff meeting.

1 credit for each hour of attendance at preceptorship meeting.

1 credit for each hour of attendance at journal clubs. Maximum of 60 credits per triennium required.

300 credits per triennium required.

Radiology Requirements

1 credit for each hour of actual attendance at postgraduate radiology lectures.

1 credit for each hour of attendance at refresher courses.

1 credit for each meeting of Kentucky Chapter, American College of Radiology.

1 credit for attendance at each non-radiological meeting such as tumor clinics, mortality and morbidity conferences, journal clubs, state and county medical meetings, cancer conferences, etc.

1 credit for each hour of organized teaching, whether medical school, hospital staff, etc. Limit of 30 credits per three-year period.

Maximum of 25 credits for original paper or exhibit presented at county society or higher level.

150 credits per triennium required.

Surgery Requirements

2 credits for each hour of attendance at national and regional surgical meetings.

2 credits for each hour of attendance at postgraduate courses.

Participation in self-evaluation examinations (such as that given by the Academy of Orthopedic Surgeons). Maximum of 35 credits per exam. Maximum of 105 credits per three-year period.

2 credits for each hour of participation in clinical or laboratory research projects. Maximum of 105 credits per three-year period.

1 credit for each hour of attendance at local or state surgical meetings or surgical specialty meetings.

1 credit for each hour of attendance at local or state medical societies, etc.

1 credit for each hour of attendance at hospital surgical staff meetings, tumor confeernces, CPC's.

1 credit for each hour of attendance at preceptorship activities at hospital or medical school.

1 credit for each hour of medical reading, audio-digest tapes, journal clubs. Maximum of 105 credits per three-year period.

5 credits for presentation or lecture before hospital staff, interns, or students.

5 credits for presentation before local or regional surgical meetings.

25 credits for publication of scientific papers.

25 credits for preparation of scientific exhibit.

300 credits per triennium required.

AMA-ERF Grants Program Aids Research

Unrestricted yearly grants to every medical school in America and the Loan Guarantee Fund are the two most well known aspects of the work of the American Medical Association Education and Research Foundation.

Another, less well known, phase of the AMA-ERF story is its Categorical Research Grants Program, representing contributions designated by the donor for research on neuromuscular disease, metabolic and endocrine diseases, neoplastic diseases, cardiovascular and pulmonary disease, arthritis and rheumatism, and miscellaneous investigation.

This program is financed through gifts and bequests earmarked for research in a specific field. For example, the late Miss C. Doreen Youngs, an Endicott, New York, school teacher, bequeathed $90,000 to AMA-ERF for research on diabetes in children. Subsequently, the AMA-ERF Board authorized a grant of $100,000 to the Peter Bent Brigham Hospital in Boston for new laboratory facilities devoted to research on renal transplants in diabetic children.

If you would like to contribute to medical research through AMA-ERF, please send your donation earmarked with the research area you desire, to AMA-ERF, 535 North Dearborn Street, Chicago, Illinois 60610, or Mrs. William R. Meeker, Jr., 417 Fayette Park, Lexington, Kentucky 40508, or to your county medical auxiliary AMA-ERF chairman.

EDITORIALS

Continuing Self-Education

I have before me a book entitled *Teaching and Learning in Medical School**. In brief, this book discusses the objectives of medical education as seen by the contributors, the techniques of instruction, and the methods for evaluation. Included in the latter are techniques for measuring knowledge, techniques for measuring performance, and techniques for measuring attitudes. In the chapter on the objectives of medical education, the following statement is presented:

"To help the student establish essential habits:

1. Of continuing self-education, through critical reading and evaluation of information, and through use of the scientific method in approaching medical problems."

Nowhere can we turn today without some discussion of continuing medical education, recertification, and relicensure. Dr. Truman Mays' comments on the critical care of medicine, seen elsewhere in this *Journal* issue, clearly emphasize this point.

It would seem to me that many programs designed for continuing medical education are presented in a somewhat traditional fashion—with little regard for innovative and possibly better instructional techniques—without due consideration given to objectives or to a satisfactory evaluation of the program. Today, optimum utilization of the time set aside for professional reading or attendance at professional meetings is essential. Some questions that we might ask ourselves include 1) Is our professional reading time most effectively put to use? Do we read the journals that will most likely be of benefit in our practice? Would a course in speedreading be helpful? 2) Are our professional meetings both at the national and local levels structured so as to offer maximal educational benefit to us? 3) Are the medical schools effective in helping the undergraduate student establish habits of continuing self-education and self-assessment?

I would submit that programs of continuing medical education, objectively defined, carefully designed and presented in an attractive package would afford us pleasant diversions from everyday duties—not an onerous task. Recertification and relicensure can then be approached with enthusiasm rather than trepidation.

GRS

Miller, George E., et al., for The Commonwealth Fund, Harvard University Press, Mass., 1962.

Critical Care Medicine

THE pressures are suitable but nonetheless real. Physicians can no longer practice 30-40 years on a single certification of their competence. "Recertification", "relicensure", "evidence of continuing competence", "self-evaluation programs" are terms whose frequent and repeated usage could justify classifying them as trite. But societal awareness of the deficits in medical skills and the continuing efforts of organized medicine to keep its constitutents competent prevent the concept from becoming trite even though the words may become so. The primary purpose of recertification must be educational, or else it sacrifices relevancy for bureaucracy.

Conditions have changed rapidly in the last ten years. New techniques, new drugs, new equipment, monitoring at bedside and roadside have been introduced to the public, sometimes even before the entire medical profession has assimilated them. It is increasingly easy to be a decade behind. Quality medical care depends upon the continuing education and development of skills.

In response to glaring needs, your state medical association is presenting a two-day symposium designed to update physicians' knowledge and practical skills in critical care medicine.

This continuing education effort is in response to deep concerns expressed through various reference committees, by the House of Delegates and the Board of Trustees. The Annual Meeting in September seemed inappropriate to add on to. It is already so large that it would be unwise to attempt such a project in conjunction with the fall meeting.

An early summer program seemed more appropriate. It is scheduled for June 4 and 5 at the Executive Inn West in Louisville. All Kentucky physicians are invited and urged to attend. It is acceptable for 13 1/2 credit hours in Category I for the Physician's Recognition Award of the American Medical Association.

The first day's program will deal with Basic Life Support. There will be didactic lectures in the morning by cardiologists, anesthesiologists and surgeons. A general discussion combined with questions and answers is to follow the didactic lectures.

A luncheon meeting features Barry Rumack, M.D., a distinguished lecturer on clinical toxicology and Assistant Professor of Pediatrics at the University of Colorado. His lectureship is sponsored by the American Academy of Clinical Toxicology, under the direction of John E. Ott, M.D.

The afternoon session is designed to improve practical skills in cardiac compression, tracheal intubation and monitoring the seriously ill with central vein catheters.

A registration fee of $20 should be forwarded to the Kentucky Medical Association Office, 3532 Ephraim McDowell Drive, Louisville 40205. The course is limited to 400 participants. Emergency department nurses and nurses primarily assigned to intensive and cardiac care areas of your hospital are also invited.

E. Truman Mays, M.D.
Chairman, Emergency Medical
Care Committee

—Hospital Costs—

Average cost in Kentucky (BC-BS data)
for an IPPB (Intermittent Positive Pressure Breathing) treatment is:
$4.82.
(Range: $2-$6)

SPECIAL ARTICLES

Kentucky's Orthopaedic Heritage†

ALFRED R. SHANDS, JR., M.D.*

ONLY two states in the Union, New York and Massachusetts, have a greater heritage in orthopaedic surgery than Kentucky. Without the brains which Kentucky contributed to the specialty in its early days, its development would have been greatly delayed. The purpose of this paper is to tell you something about this heritage and these brains.

In 1839 there went to New York from Lexington, Lewis Albert Sayre (1820-1900), Fig. 1, who became the most outstanding orthopaedic surgeon of the 19th century, and was spoken of as the father of American orthopaedic surgery.[19] Doctor Sayre was born in New Jersey, the son of a wealthy farmer who died when Lewis was 10 years old. He was taken to Lexington to be brought up by his uncle, David A. Sayre, a prominent banker and Presbyterian churchman. It was his uncle's desire that Lewis, who was like a son, should go into the ministry, but Lewis had other ideas; his heart was set on medicine and not religion. Lewis Sayre, after graduating from Transylvania College, took his medical degree in 1842 at the College of Physicians and Surgeons in New York. In 1861 he was one of the prime movers in the organization of the Bellevue Hospital Medical College, and became the Professor of Orthopaedic Surgery, Fractures and Dislocations. This was the first orthopaedic professorship in any American medical school.

One of the greatest things which Doctor Sayre did for orthopaedic surgery was the demonstration of the value of the plaster of paris jacket in the treatment of tuberculosis of the spine (Pott's disease).[16] In 1874 he completely encased in plaster the entire trunk of a four-year-old girl with spinal tuberculosis; this had never been done before. Thus began the era of the plaster jacket which soon became known everywhere as the Sayre jacket. It has been written that this was one of the greatest discoveries in orthopaedic surgery of all times[9] and "that this method of treatment marks an era in the history of medicine."[19]

Doctor Sayre was very well known abroad, and quite popular in England. In 1877 he wrote a book, *Spinal Disease and Spinal Curvature*,[17] while in England. It was published in London and dedicated to the medical profession of Great Britain, which, as he said, had "received me with such great personal and professional cordiality." It was stated in Great Britain that "by his forceful teaching, he did more than any other surgeon of his generation to establish the position of American surgery in Europe on a firm basis."[19]

Doctor Sayre had a very strong personality, an imposing appearance, and an authoritative speech which stamped him as a leader of the first magnitude. However, he was a controversial figure, probably because of his frankness and sometimes because of his lack of tact and diplomacy. He was spoken of by Lord Lister as being "the roughest of rough diamonds." His writings were prolific. In addition to his book on the spine in 1876, he published what was then the best textbook in orthopaedic surgery,[16] which had two editions, and in 1869 he published a book on clubfeet[15] which went through four editions. He states in one of his writings that he "must be



FIG. 1. Lewis Albert Sayre, M.D. (1820-1900). Courtesy of New York Academy of Medicine

‡Presented at a Meeting of the Innominate Society of Medical History, Louisville, May 24, 1974

**Medical Director Emeritus, Alfred I. du Pont Institute, Wilmington, Delaware*

permitted to question what is questionable, and to doubt what is doubtful," and this he repeatedly did in such vigorous language that at times he was very upsetting to many of his confréres. It was written after he died that "orthopaedic surgery is no longer, thanks to the energy of Doctor Sayre, his brilliancy as a writer and a teacher, a neglected branch of surgery." "Doctor Sayre has not only promoted the cause of the treatment of deformities, he has broadened the field of general surgery."[4]

Doctor Sayre had many honors. He was President of the American Medical Association[6] in 1880 (the only orthopaedic surgeon ever to have been its President) and was considered to be the father of the *Journal of the American Medical Association.*

It is rather interesting to read what Virgil Gibney wrote about Doctor Sayre.[3] He stated that Sayre was a giant in orthopaedic surgery and that his own interest in the specialty was awakened by Doctor Sayre. Doctor Gibney said that Sayre always claimed Kentucky to be his own state by adoption. "In generosity and hospitality and in forcefulness of expression, he was a Kentuckian through and through, even if Bottlehill, New Jersey, was his birthplace," wrote Doctor Gibney. Doctor Sayre died in 1900 at the age of 80. He had three sons, all of whom became orthopaedic surgeons, and one daughter. After Doctor Sayre died, it was written in the *British Medical Journal,*[6] "Few men in this generation accomplished so much for the relief of humanity and his name will go down to posterity with that of J. Marion Sims, as amongst the most distinguished benefactors whom the American medical profession has produced for the glory of medicine, and the good of mankind during this century." A wonderful tribute to a great physician, a pioneer in orthopaedic surgery, one of the greatest orthopaedic surgeons of all times, and a Kentuckian by adoption.

The second most prominent in Kentucky's orthopaedic heritage is Virgil Pendleton Gibney (1847-1927), Fig. 2. Doctor Gibney was born in Jessamine County on September 29, 1847. His father was Doctor Robert A. Gibney (1816-1874), who was born in Lexington and had taken his medical education at Transylvania; he was a general practitioner and an outstanding citizen of Lexington and Nicholasville. Virgil Gibney took his early education in the schools of Nicholasville, followed by one year at Georgetown College and three years at Transylvania, where he received his A. B. degree in 1869; thirty years later he was given an honorary degree by Transylvania. The first year of his medical education was taken at the University of Louisville, and the second year at Bellevue Hospital Medical College in New York, where he received his M.D. in 1871. In this same year he became the assistant physician and surgeon at the Hospital for the Ruptured and Crippled (R & C) under Doctor James Knight (1810-1887), one of New York's pioneer orthopaedic surgeons. Gibney did not always agree with Knight, who was extremely dogmatic in his thinking and dictatorial in his methods of conducting the clinical services. Particularly, he disagreed with Knight on the treatment of tuberculosis of the hip which was a

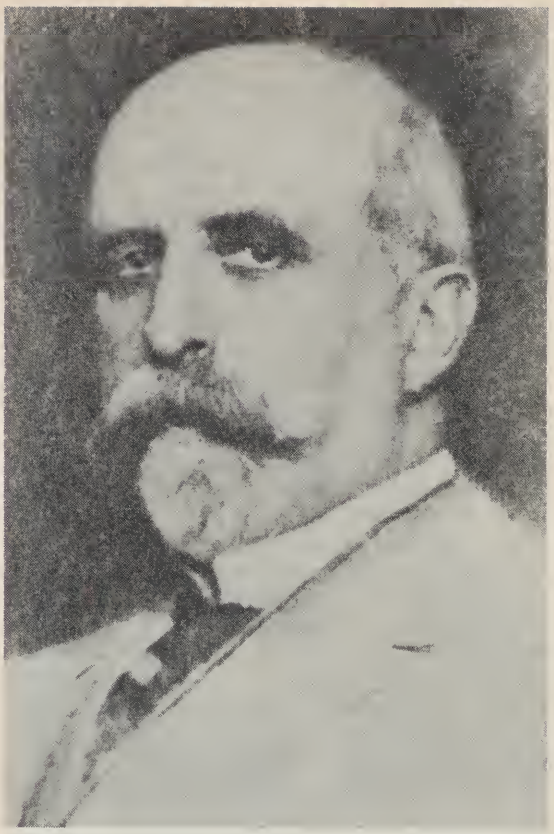


FIG. 2. Virgil Pendleton Gibney, M.D. (1847-1927). Courtesy of the Gibney family

common condition at that time. In 1884, without Doctor Knight's knowledge, Doctor Gibney published a book, *The Hip and Its Diseases,*[7] in which many opinions were expressed contrary to those of Doctor Knight. Immediately, Knight asked for his resignation.

Following Knight's death in 1887, Virgil Gibney was appointed Surgeon-in-Chief of the Hospital. The great growth and accomplishments of the R & C took place under Doctor Gibney's leadership, and it soon became the foremost institution of its kind in the United States. It is said that Doctor Gibney had a rare gift for choosing capable associates—men who would become leaders in their respective fields. The greatest of these was Royal Whitman (1857-1946) of Boston. Doctor Whitman's name is as famous as that of Doctor Gibney in orthopaedic surgery.

After 50 years of association with the R & C Hospital, in 1921 Doctor Gibney was given a testimonial dinner. On this occasion, Doctor Charlton Wallace (1872-1946) said that Doctor Gibney had trained 134 residents. At that time, nine were professors of orthopaedic surgery, eight assistant professors, and 18 instructors in medical colleges, a record unequalled by any other teacher in orthopaedics of this period. One of his associates wrote that of all his sterling qualities, the spirit of helpfulness and encouragement that he always showed toward the younger men stood out as the foremost. In 1882 Doctor Gibney was one of the founders of the New York Polyclinic Medical School and its first Pro-

fessor of Orthopaedic Surgery. In 1894 he was the first Professor at Columbia University College of Physicians and Surgeons. He held this position until June, 1917, when he was succeeded by Doctor Russell A. Hibbs. Doctor Gibney was one of the founders and first President of the American Orthopaedic Association and also its 25th President.

Doctor Gibney was a prolific writer. In addition to his well-known book, *The Hip and Its Diseases,*[7] he contributed over 200 articles to the literature. He was considered an authority in the treatment of bone and joint tuberculosis, to which subject one-fourth of his publications are devoted.

Doctor Gibney was fearless in expressing his views, and usually swayed opinion by his diplomatic demeanor. He was an indefatigable worker with untold energy and never seemed to tire until his later years. He possessed unusual mechanical skill in the design of braces and the use of plaster. Doctor Gibney's name is still attached to an adhesive plaster dressing for sprained ankles, spoken of as a "Gibney Boot", for which he disclaimed originality.

Doctor Gibney is said to have had a remarkable influence on his patients, most of whom adored him, and waited patiently for his rounds when his wonderful smile would at once make them feel better, and oftentimes do more good than medical treatment. Doctor Gibney's kindly disposition endeared him to everyone with whom he came in contact. He was always encouraging the younger men and ever ready to help when called upon.

Doctor Gibney married twice, first in 1883 to Charlotte Chapin from Springfield, Massachusetts, by whom there were two sons, Virgil, Jr., and Robert. She and young Virgil died of diphtheria in 1887, the saddest blow in Doctor Gibney's life. His second wife was Julian Alvord Trubee, of Bridgeport, Connecticut, by whom there were two daughters. When he died in June, 1927, in *The Bone and Joint Journal* was written,[10] "Doctor Gibney is dead, but his memory liveth, and will live because he was more than a surgeon. He was a man with greatness in him." In 1929 at the dedication of Virgil Gibney's bust at the R & C, he was spoken of as "one of the greatest medical men of all times, his name to be associated with Pasteur and Lister."[18]

The third great orthopaedic figure from Kentucky is Russell Aubra Hibbs (1869-1932), Fig. 3. Doctor Hibbs was born in Birdsville, on the Ohio River, near Paducah. He worked on a farm in his early days. Hibbs went to Bethel College in Russellville, Kentucky, and then entered Vanderbilt University at Nashville where he received his academic degree in 1888. In 1890 he took his M.D. degree at the University of Louisville. After practicing in Texas for four years he went to New York, where he worked for one year in the Polyclinic Hospital. He then became associated with the New York Orthopaedic Hospital. In 1898, upon the resignation of Doctor Newton Shaffer, he became the Surgeon-in-Chief when he was 29 years old and continued in this position until he died in 1932 at the early age of 63.

During this time he was a great leader of orthopaedic surgery in New York and in the country. Before he went to the New York Orthopaedic, no major surgery had been done. Hibbs became a superb surgeon and developed many original techniques. His first greatest surgical achievement came in 1911 when he described an operation for fusion of the spine for tuberculosis by splitting the spinous processes and chipping up the laminal arches. At the same time, Doctor Fred Albee (1876-1945) described the use of the bone graft for the fusion of the spine. There was a great argument for many years as to which technique was the best. Doctor Hibbs won out. He was the first to emphasize the role played in low back pain by an unstable fifth lumbar vertebra, for which he described a fusion operation. In 1923 he described a fusion operation for scoliosis with a report of 59 cases; however, the first operation he had done as early as 1914. In 1926 he described a method for fusion of the hip which is said to have been his last great surgical triumph. In addition to his operations for fusion of the spine and hip, he also described many satisfactory fusion operations for the knee, ankle, and other joints. No one in early orthopaedic surgery did more to develop our surgical techniques than Russell Hibbs.

The lectures of Doctor Hibbs were said to have aroused the keen interest of all his students and made his courses very popular. He had a very strong personality which left its stamp on every young man who went through his training service. Doctor Hibbs had the knack of dramatizing his subject, and imparting to his students something of his own enthusiastic spirit.

Russell Hibbs was a genius at organization and administration. He developed his hospital into an institution unique in its efficient management. It was written that his hospital was a monument to his

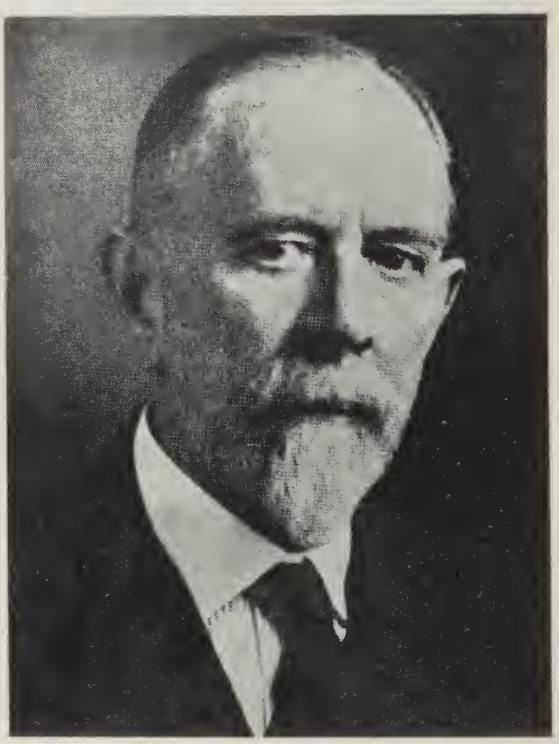


FIG. 3. Russell Aubra Hibbs, M.D. (1869-1932). From A Century of Progress in Orthopaedic Surgery

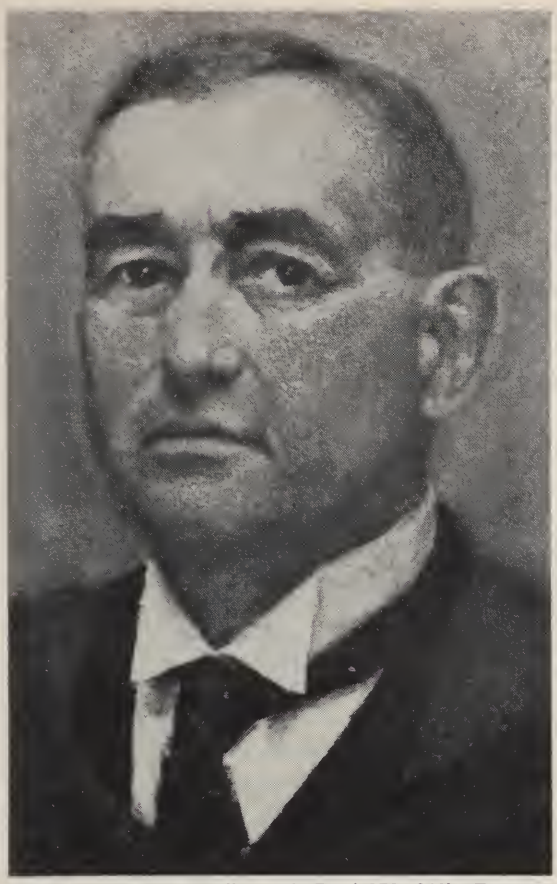


FIG. 4. Charlton Wallace, M.D. (1872-1946). From a portrait at Transylvania University

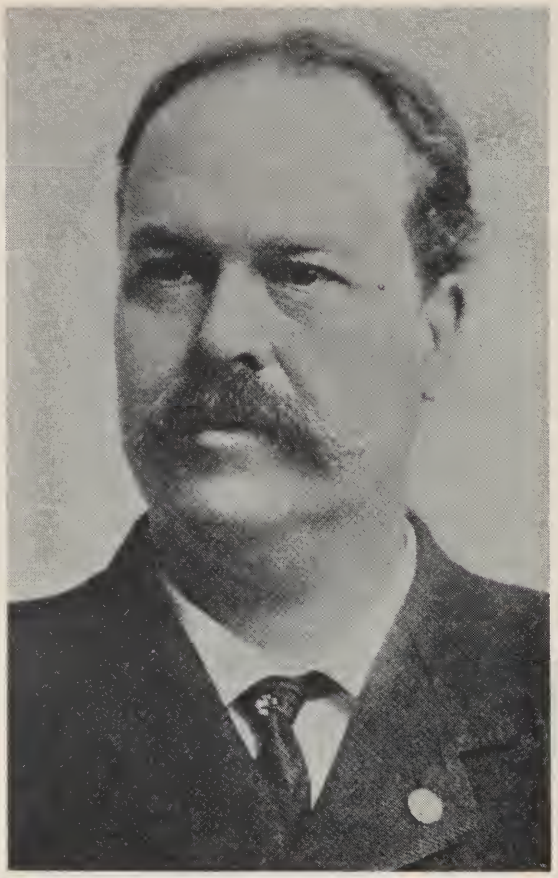


FIG. 5. Ap Morgan Vance, M.D. (1854-1915). From A Retrospect of Surgery in Kentucky

honor, more enduring than brass, and worthy of the highest ambitions in which a mortal can aspire.

The last of Kentucky's transplanted and famous orthopaedic sons was Charlton Wallace, Fig. 4, (1872-1946) of Lexington.[12,21] His father was John B. Wallace, and his mother, Lucy Wilhoit Sims. He went to Transylvania Academy and then to Transylvania University, where he received his B. A. in 1894. He then went to New York and took his medical degree at the College of Physicians and Surgeons at Columbia in 1898. He took his training in orthopaedic surgery at the R & C Hospital under Doctor Gibney, assisted Doctor Gibney in his office practice, and became an attending orthopaedic surgeon at the R & C.

His prime interest was always crippled children. One of the great things which Doctor Wallace did in the New York area was to help to establish and become the Surgeon-in-Chief of the St. Charles Hospital for Crippled Children at Port Jefferson, New York. In 1929 he became the Surgeon-in-Chief of the New York State Reconstruction Home for Crippled Children at West Haverstraw, which has since become one of the great orthopaedic institutions of the country. He was Professor of Orthopaedic Surgery at Cornell University Medical School for 22 years, from 1913 to 1935, and at the time of his death was Professor of Orthopaedic Surgery at the New York Polyclinic Medical School and Hospital. He was the author of more than 20 articles on orthopaedic surgery; many of these were concerned with crippled children and their education. Charlton Wallace was an excellent speaker and teacher. He died at his home in Chappaqua, New York, on August 16, 1946.

The two most prominent sons of Kentucky who practiced orthopaedic surgery in Louisville were Doctor Ap Morgan Vance (1854-1915), Fig. 5, and Doctor William Barnett Owen (1880-1947), Fig. 6. The first of these, Doctor Vance,[1] was born in Tennessee and graduated in medicine in 1878. He was said by Doctor Irvin Abell to have been "the first in Kentucky to limit his practice to surgery, and for years the only one devoting special attention to orthopaedics." He made many pioneer contributions, including a subcutaneous femoral osteotomy for hip deformity described in 1888. He was offered many teaching positions, but chose, as he said, to remain "a free lance." He was a great public-spirited person, being one of the founders and chief benefactor of the Children's Hospital in Louisville, in which a memorial ward to him was established.

He was a member of the commission which erected the Louisville Public Hospital, which it is written was in a large measure a tribute to his efficient supervision. He was one of the founding members of the American Orthopaedic Association in 1887, and in 1890 was its Vice-President. He was President of the Kentucky State Medical Association the year of his death in 1915.



FIG. 6. William Barnett Owen, M.D. (1880-1947). From author's collection of photographs

The second most prominent Kentuckian who practiced in Louisville in more recent years was the much beloved Barnett Owen,[13] Fig. 6. Doctor Owen was born in 1880, in Munfordville, Hart County. He was graduated from University of Kentucky Medical School in 1903, and went to New York to take his orthopaedic training under Doctor Gibney at the Hospital for the Ruptured and Crippled. His wife was a niece of Doctor Gibney's.

Barnett began practice in Louisville in 1906, where the entire 40 years of his professional life was spent. One of his great accomplishments was his part in the founding of the Kosair Crippled Children's Hospital, of which he was Chief of Staff for 22 years. He was Professor of Orthopaedic Surgery at the University of Louisville and Chief of the Orthopaedic Service at the Louisville General Hospital. Barnett was a very active member of the American Orthopaedic Association, and also the Southern Surgical Asociation. He was Chairman of the American Medical Association Orthopaedic Section in 1932, Chairman of the Southern Medical Orthopaedic Section 10 years before in 1922, and President of the Clinical Orthopaedic Society. Barnett Owen was not a prolific writer, but what he wrote was extremely well prepared. This author knew Barnett very well, and also knew about his many accomplishments for the crippled child in Kentucky, including the part he played in the founding of the Kentucky Crippled Children's Commission and the Kentucky Crippled Children's Society, both of which have been so effective in the State's programs for the care and education of handicapped children. He died in 1947, much too soon, at the age of 67.

There are many others I have not mentioned who should be included, for which omission I apologize. Kentucky has a great heritage in medicine and few states can boast of a greater heritage in orthopaedic surgery than Kentucky. Where would American orthopaedics be today without a Sayre, or a Gibney, or a Hibbs?

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Membership Response to the Professional Liability Insurance Questionnaire

THOMAS M. MARSHALL, M.D.*

IT is evident from the response to the Kentucky Medical Association Questionnaire on Professional Liability Insurance that the liability insurance situation is one of the most pressing problems facing the physician today. Over 3,000 questionnaires were mailed to all members of the Association in February, 1975. This was done at the request of the KMA Physician-Attorney Liaison Committee which has been studying the scope of the liability insurance problem in Kentucky.

Forty percent of the questionnaires mailed were returned indicating high interest in this situation. The survey, which was composed of nine questions, dealt with such matters as the type of specialty class of the physician, his carrier, base coverage, annual premium, excess liability coverage, coverage refusal, claims and suits, and whether or not there was an interest in a KMA-sponsored liability insurance program. Comments were also welcomed and received.

Responses to the questionnaire revealed that:

1. Almost all of those responding (98.4%) are covered by professional liability insurance.

2. Over 63% of the respondents are insured with the Medical Protective Company.

3. Over 62% of those covered also have excess or "umbrella" type of coverage. Of the 62%, 85.8% had coverage of $1 million.

4. 96% of the physicians have a base coverage of $100,000/$300,000 or higher.

5. When asked whether they had been refused liability insurance within the last three years, 4.5% responded yes, with 6.5% responding yes from the designated Area 2. Of those companies refusing insurance, Medical Protective was named by 23 out of 48 refusals.

6. 10.9% and 12.5% of the physicians have been named as a co-defendant of a suit with a hospital and/or individually, respectively.

7. Premiums range from $100 to $10,000. However, 53.8% of the premiums fall between $100-$1000, while less than 10% are higher than $3,000.

It should be mentioned that total responses for this survey were 1233 and all questions were not answered by all respondents.

In response to the proposal of a KMA-sponsored liability insurance program, 66.91% favored the possibility of such a program; 29.66% were undecided, but felt they would probably go along with such a program. There were 33 absolute "no" responses for a percentage of 3.43.

Area 1 — Louisville, Lexington, Ashland, Bowling Green, Covington, Owensboro & Paducah
Area 2 — Remainder of Kentucky

TABLE 1

SPECIALTY CLASSES	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
Class I	332	41.14	137	32.38	469	38.13
Class II	50	6.20	90	21.28	140	11.39
Class III	46	5.70	39	9.23	85	6.91
Class IV	238	29.49	72	17.02	310	25.20
Class V	141	17.47	85	20.08	226	18.37
Total	807	100.00	423	100.00	1230	100.00
Miscellaneous					3	
					1233	

TABLE 2

CARRIER	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
Med. Prot.	461	65.11	258	59.58	719	63.02
Aetna	103	14.56	33	7.62	136	11.92
Other	132	18.64	136	31.41	268	23.49
No Ins.	12	1.69	6	1.39	18	1.57
Total	708	100.00	433	100.00	1141	100.00

TABLE 3

BASE COVERAGE	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
$10,000/ 30,000	23	3.39	11	2.74	34	3.15
$100,000/ 300,000	289	42.69	215	53.62	504	46.75
$200,000/ 600,000	246	36.34	100	24.94	346	32.10
Other	119	17.58	75	18.70	194	18.00
Total	677	100.00	401	100.00	1078	100.00

*Chairman, Ad Hoc Committee on Professional Liability Insurance and Co-Chairman, Physician-Attorney Liaison Committee

TABLE 4

ANNUAL PREMIUM	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
$100-500	178	29.32	91	26.62	269	28.35
501-1000	144	23.72	98	28.65	242	25.50
1001-1500	60	9.88	41	11.99	101	10.64
1501-2000	70	11.53	40	11.69	110	11.59
2001-3000	91	14.99	44	12.86	135	14.22
3001-4000	28	4.62	17	4.97	45	4.74
4001-5000	19	3.13	6	1.75	25	2.63
5001-8000	15	2.48	3	.89	18	1.90
8001-10,000	2	.33	2	.58	4	.43
Total	607	100.00	342	100.00	949	100.00

(Not included: $88,000 for 41 physician clinic in Area 2)

TABLE 5

EXCESS LIABILITY	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
None	226	34.94	181	42.69	407	38.00
$1 mill.	340	52.55	230	54.24	570	53.22
$2 mill.	47	7.26	8	1.89	55	5.13
Higher	34	5.25	5	1.18	39	3.65
Total	647	100.00	424	100.00	1071	100.00

TABLE 6

REFUSED LIABILITY COVERAGE	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
YES	24	3.47	24	6.47	48	4.50
NO	668	96.53	347	93.53	1019	95.50
Total	692	100.00	371	100.00	1067	100.00

TABLE 7

Companies Which Have Refused Insurance	Area 1	Area 2	STATE
Medical Protective	8	15	23
St. Paul	5	5	10
Aetna	5	—	5
Insurance Co. of North America	1	1	2
American College of Physicians	1	—	1
Buckeye	—	1	1
Other	3	3	6
Total	23	25	48

TABLE 8

CO-DEFENDANT SUIT W/Hosp.	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
YES	92	13.29	26	6.74	118	10.94
NO	600	86.71	361	93.26	961	89.06
Total	692	100.00	387	100.00	1079	100.00

TABLE 9

DEFENDANT OF SUIT	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
YES	83	12.57	49	12.37	132	12.49
NO	577	87.43	348	87.63	925	87.51
Total	660	100.00	397	100.00	1057	100.00

TABLE 10

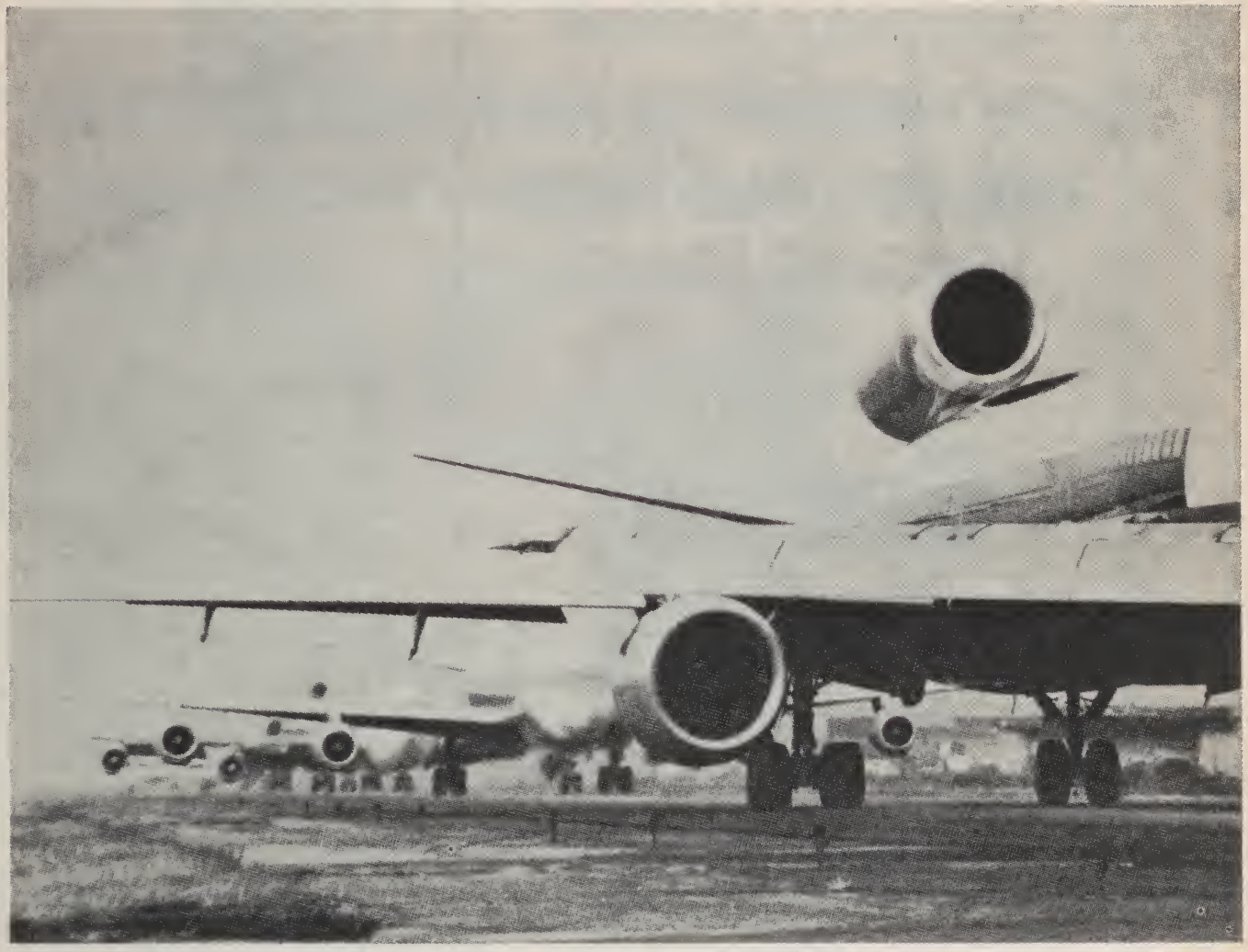
Court Action	Area 1	Area 2	STATE
Pending	43	24	67
Settled	37	19	56
In Your Favor	27	8	35
In Court	10	8	18
Out of Court	19	11	30

TABLE 11

Interest in KMA-Sponsored Program	Area 1 #	Area 1 %	Area 2 #	Area 2 %	STATE #	STATE %
YES	420	69.08	223	63.07	643	66.91
NO	17	2.80	16	4.54	33	3.43
UN-DECIDED	171	28.12	114	32.39	285	29.66
Total	608	100.00	353	100.00	961	100.00

The KMA Task Force on Liability Insurance will hold an Open Forum at the Breckinridge Inn, Louisville, at 1 p.m. on June 5, 1975. All Kentucky physicians are welcome to attend this important Forum.

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Indications: Pro-Banthine is effective as adjunctive therapy in the treatment of peptic ulcer. Dosage must be adjusted to the individual.

Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflux esophagitis, or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution. Fever and possibly heat stroke may occur due to anhidrosis.

Overdosage may cause a curare-like action, with loss of voluntary muscle control. For such patients prompt and continuing artificial respiration should be applied until the drug effect has been exhausted. Diarrhea in an ileostomy patient may indicate obstruction, and this possibility should be considered before administering Pro-Banthine.

Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

How Supplied: Pro-Banthine is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg.

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Vigorous anticholinergic action—Pro-Banthine® Vials, 30 mg., are for intramuscular or intravenous use when prompt and vigorous anticholinergic action is required.

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a good option in peptic ulcer

In most cases of sustained moderate hypertension,

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usually offers more than effective lowering of blood pressure...



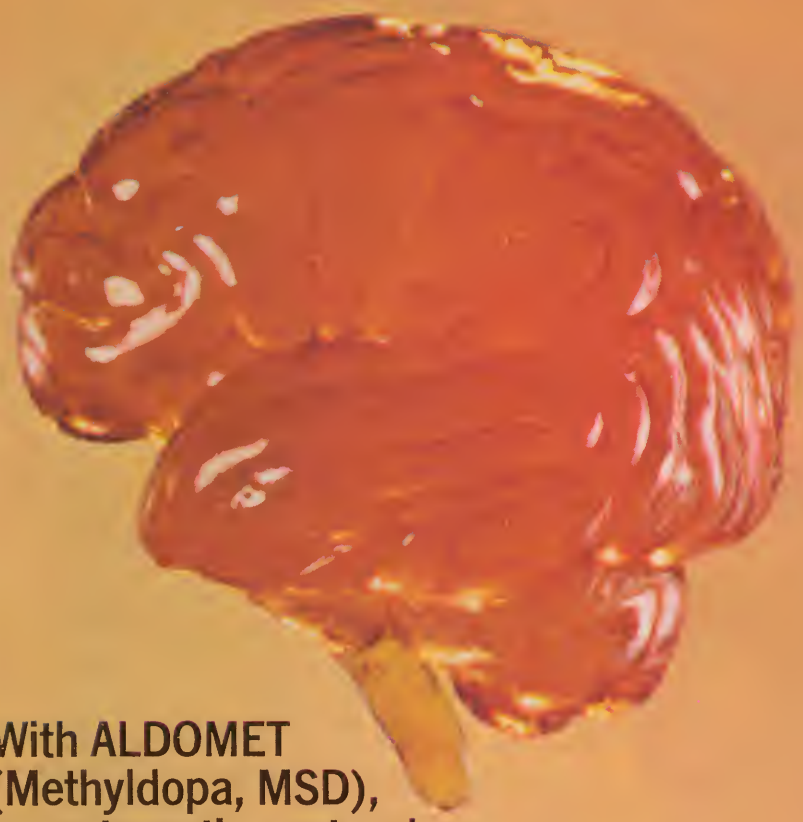


With ALDOMET (Methyldopa, MSD), existing renal function is usually unchanged

ALDOMET has no direct effect on renal function. When used in effective doses, ALDOMET usually does not reduce glomerular filtration rate, renal blood flow, or filtration fraction.

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TABLETS, 250 mg and 500 mg

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a unique antihypertensive agent

Contraindications include active hepatic disease and known sensitivity to the drug. Use with caution in patients with a history of liver disease or dysfunction. Not recommended in pheochromocytoma or pregnancy.

It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. For more details see the brief summary of prescribing information.

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For a brief summary of prescribing information, please see following page.

addendum

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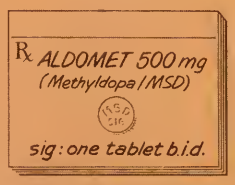
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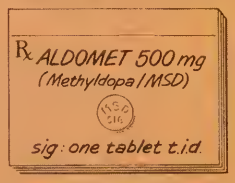
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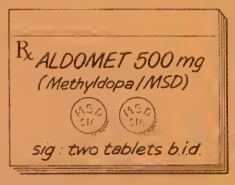
1.0-g daily dose =

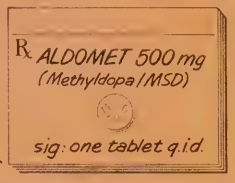


1.5-g daily dose =



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NOTE: Tablets shown are not actual size.

in sustained moderate hypertension

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usually lowers blood pressure effectively



Contraindications: Active hepatic disease, such as acute hepatitis and active cirrhosis. Known sensitivity. Not recommended in pheochromocytoma. Unsuitable in mild or labile hypertension responsive to mild sedation or thiazide therapy. Use cautiously in patients with history of previous liver disease or dysfunction.

Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between six and twelve months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at six and twelve months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first three weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first two to three months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first six to twelve weeks of therapy or whenever an unexplained fever occurs. If fever, abnormalities in liver function tests, or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, reversible reduction in leukocyte count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur.

Use in Pregnancy and Childbearing Age—Not recommended in pregnancy. In women of childbearing age, weigh potential benefits against possible fetal hazards.

Precautions: Methyldopa may interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, spuriously high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has occurred after dialysis in patients on methyldopa because the drug is removed by this procedure.

Adverse Reactions: Sedation, usually transient, may be seen during initial therapy or when dosage is increased. Headache, asthenia, or weakness may be noted as early, transient symptoms. Symptoms associated with effective lowering of blood pressure are occasionally seen and include dizziness, lightheadedness, and symptoms of cerebrovascular insufficiency. Angina pectoris may be aggravated. Symptoms of orthostatic hypotension may occur; if symptoms occur, reduction of dosage is suggested. Bradycardia, nasal stuffiness, mild dryness of mouth, and gastrointestinal symptoms including distention, constipation, flatus, and diarrhea occur occasionally; these generally can be relieved by reducing dosage. Nausea and vomiting have been reported in only a few patients. Sore tongue or "black tongue," pancreatitis, and inflammation of salivary glands may occur.

Weight gain and edema occur infrequently and are relieved by administering a thiazide diuretic; if edema progresses or signs of pulmonary congestion appear, discontinue drug. A rise in BUN has been observed. Other rare reactions include breast enlargement, lactation, impotence, decreased libido, skin rash, mild arthralgia, myalgia, paresthesias, Bell's palsy, parkinsonism, psychic disturbances including nightmares, reversible mild psychoses or depression. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Note: Dosage should be limited initially to 500 mg daily when following previous antihypertensive agents other than thiazides. Maximal recommended daily dose is 3.0 g. Patients with impaired renal function may respond to smaller doses than patients with normal kidney function. Syncope in older patients has been related to increased sensitivity in those with advanced arteriosclerotic vascular disease; this may be avoided by lower doses. Tolerance occasionally seen either early or late, but more likely between second and third month after initiation of therapy; increased dosage or combined therapy with a thiazide frequently restores effective control.

How Supplied: Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 1000; Tablets, containing 500 mg methyldopa each, in single-unit packages of 100 and bottles of 100.

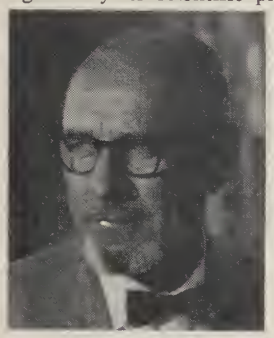
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ORGANIZATION SECTION

Guest Speakers To Provide Outstanding Scientific Program At 1975 KMA Annual Meeting, September 23-25

The KMA Annual Meeting will again be highlighted by its scientific program, to be held September 23-25 at the Ramada Inn/Bluegrass Convention Center in Louisville. According to Hoyt D. Gardner, M.D., Louisville, KMA President, distinguished guest speakers from Kentucky and throughout the nation will participate in this year's annual session.



Doctor Bunge

Themes for the four general sessions will be: "Sexual Performance", "Cancer—Detection and Therapy", "Sports Medicine", and "Gut—Issues and Answers.

The KMA Scientific Program Committee, chaired by Gabe A. Payne, Jr., M.D., Hopkinsville, designed the program so that every medical specialty will be represented. Eighteen specialty groups will meet during the three-day session and present individual guest speakers and local physicians on a wide range of medical subjects.

Speaking during the opening session on September 23 will be Raymond G. Bunge, M.D., Iowa City, Iowa; Bernard L. Cinberg, M.D., New York; and William S. Davis, M.D., Denver.

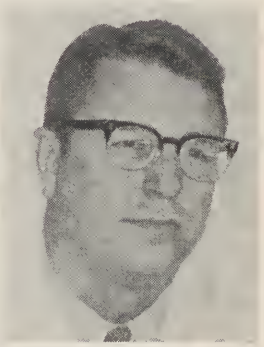
Doctor Bunge, Professor in Urology at the University of Iowa College of Medicine, will discuss "Sexual Performance After Urological Operations". A member of the American Association of Genito-Urinary Surgeons, the American Urological Association, and a Diplomate of the American Board of Urology, he was awarded the Ayerst Lectureship Award of the American Fertility Society in 1970.

Doctor Cinberg, an Associate in Obstetrics-Gynecology at Beth Israel Hospital, New York, will deal with "Sexual Performance: Fact and Fiction". A member of the American Board of OBS-GYN and of the American College of OBS-GYN, Doctor Cinberg is the author of numerous articles in the field.

Doctor Davis, Director of Radiology at Children's Hospital, Denver, is also Associate Clinical Professor of Radiology and Pediatrics at the University of Colorado School of Medicine, Denver. A member of the American Society of Pediatric Radiology, the American Academy of Pediatrics, and the American College of Radiology, he has authored several articles on pediatric radiology.



Doctor Cinberg



Doctor Davis

Two meetings of the KMA House of Delegates, the President's Luncheon, a wide variety of scientific and technical exhibits and the Annual Convention of the Woman's Auxiliary to KMA will also take place during the 1975 session. All activities will be held at the Ramada Inn/Bluegrass Convention Center located at the intersection of I-64 and Hurstbourne Lane.

Further details on other speakers and highlights of the 1975 KMA Annual Meeting will be published in upcoming issues of *The Journal* and *The Communicator*.

Plans For Scientific Exhibits Should Be Made Now

John M. Baird, M.D., Danville, Chairman of the KMA Scientific Exhibits Committee, urges all physicians interested in presenting scientific exhibits at the 1975 Annual Meeting to make their plans now.

Application for space should be received by July 1, 1975 at the Headquarters Office. Exhibits need not be expensive or professionally constructed, but should have a good subject and be of teaching value.

The year's Annual Meeting will be held September 23-25 at the Bluegrass Convention Center, Louisville. An application blank appeared in the April *Journal of KMA* on Page 210. An application blank may also be obtained by writing the KMA Headquarters Office, Scientific Exhibits, 3532 Ephraim McDowell Drive, Louisville 40205.

1975 Emergency Care Seminar Approved For CME Credit

The 5th Annual Emergency Health Care Seminar, set for June 4-5, at Executive Inn West, Louisville, will offer Kentucky physicians an educational program with state and national experts and continuing medical education credit from several organizations.

The American Medical Association will give credit per hour toward the Physician's Recognition Award, and the following groups also offer credit: the Kentucky Chapter of the American College of Emergency Physicians, 9 1/2 hours; the American Academy of Family Physicians, 10 1/2 hours; and the Kentucky Dental Association, 5 points.

Special resuscitation situations, including electric shock, drowning, and smoke inhalation and CO poisoning, and practice sessions in tracheal intubation, cardiac compression, and centrovenous catheters and pressures are highlighted during the first day of the seminar. Discussions of "Liability in Emergency", "The Battered Child", and "Tetanus Immunization" will be presented during the second day.

J. Ed McConnell, President of Blue Cross, Blue Shield and Delta Dental of Kentucky, Louisville, will be the featured speaker at the luncheon on Wednesday, June 4. The luncheon speaker for Thursday, June 5, will be Barry H. Rumack, M.D., Director of the Rocky Mountain Poison Center, Denver, Colorado. Doctor Rumack will speak on "Management of Acute Poisoning".

Registration is at 8:00 a.m. each morning. A complete program and pre-registration form were sent out with the April *Communicator,* and further details can be obtained from KMA Headquarters.

AMA Annual Convention Will Be June 14-18 in Atlantic City

The 124th Annual Convention of the American Medical Association, scheduled for June 14-18 in Atlantic City, N.J., will include an array of postgraduate courses, general and specific symposia, scientific exhibits, commercial exhibits, and motion picture symposia. Almost all programs, even many of the scientific exhibits, have been approved for Category I credit.

A new feature this year is closed circuit television, which will bring the medical education courses into the hotel rooms, with self-assessment post-tests given to certify participation.

Biologist Rene Dubos, Ph.D., professor emeritus at Rockefeller University, will lecture in a special three-hour program on Tuesday, June 17. His theme will be "Science and Ideals in a Hungry, Angry World."

The complete program for the Annual Convention, as well as hotel reservation and advance registration information, appeared in the April 28 issue of *JAMA.*

Emergency Health Care Seminar Program — June 4-5

WEDNESDAY, JUNE 4

Registration—8:00 a.m.

Morning Session

Theme: *"Basic Life Support"*
"Emergency Cardiac Care"—Ralph Shabetai, M.D.
"Ventilatory Support"—Mark Ravin, M.D.
"Blood Volume Restoration"—Hiram C. Polk, Jr., M.D.
"Cardiopulmonary Resuscitation"—Charles A. Webb, M.D.
Panel Discussion of "Basic Life Support"
Noon Luncheon
Speaker: J. Ed McConnell, President, Kentucky Blue Cross, Blue Shield, and Delta Dental, Louisville

Afternoon Session

Practice Sessions
Special Resuscitation Situations

THURSDAY, JUNE 5

Registration—8:00 a.m.

Morning Session

"Liability in Emergency"—Carl Wedekind, KMA Legal Counsel
"Military Assistance to Safety and Traffic"—Jack VonderHaar, MAST Coordinator
"The Battered Child"—Thomas A. Courtenay, M.D.
"Tetanus Immunization"—Richard J. Menke, M.D.
"Head and Facial Trauma"—Andrew M. Moore, M.D.
Luncheon
Speaker: Barry H. Rumack, M.D., Director, Rocky Mountain Poison Center, Denver, Colorado.

Afternoon Session

"Ophthalmologic Emergencies"
"Extremity Injuries"—Harold E. Kleinert, M.D.
Discussion Group
Adjournment

The fifth annual General Session and House of Delegates meeting of the **American Association of Foundations for Medical Care,** combined with the annual Educational Session of the American Association of Professional Standards Review Organization, will be held this year in San Francisco, August 9-13. Some 31 hours of workshops and general sessions will focus on consideration of various aspects of the nation's health care picture. For further information of registration and reservations, contact AAFMC, P.O. Box 230, Stockton, California 95201, phone (209) 948-4550.

"Internal Medicine Update 1975" To Meet at Barren River

The Kentucky chapter of the American College of Physicians will sponsor "Internal Medicine Update 1975" Thursday, May 22, through Sunday, May 25, at Barren River Lake State Resort Park in Cadiz.

The program, co-sponsored by the Department of Continuing Education, College of Medicine, University of Louisville, and the Office of Continuing Education, College of Medicine, University of Kentucky, will feature members of both medical faculties presenting updates on infectious disease, gastroenterology, hematology, cardiology, endocrinology, and nephrology.

This course is accredited for 12 hours of Category I credit toward the Physician's Recognition Award or toward satisfaction of state or other local requirements in continuing medical education.

The registration fee is $50 for ACP members, $25 for associate members, and $65 for non-members.

For information, contact E. Scott Donovan, Assistant Director, Office of Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

Mr. Ledford Joins KMA Staff

Jan L. Ledford, a 30-year-old native of Louisville, joined the staff of the Kentucky Medical Association on April 1. In his new position, Mr. Ledford will assume various administrative duties, part of which are now held by Gil Armstrong, who will retire in June, 1975.



Immediately prior to joining KMA, Mr. Ledford was assistant store manager for Stewarts Dry Goods —Oxmoor in Louisville. He had previously held several other managerial positions with Stewart's and also with Montgomery Ward and Company of Chicago.

A 1967 graduate of Transylvania University with a major in psychology, Mr. Ledford has been extremely active in civic affairs in Louisville. He is membership chairman of the Louisville Jaycees, treasurer of the Shryock Elementary School PTA, president of the Century Investment Club and has served as a team chairman in the United Fund of Louisville.

He is married and has two children.

"Medical Critical Dimension" Wraps Up In Ashland

The fifth and final seminar of the "Medical Critical Dimension, 1975" series will be held in Ashland, May 29, at the Bellefonte Country Club.

The evening's program will include Max H. Parrott, M.D., Portland, Oregon, AMA President-Elect, speaking on "National Health Insurance" and Ned Parish, Chicago, President, National Association of Blue Shield Plans, on "The Role of Voluntary Pre-Payment Systems".

Also featured in the seminar are R. Glenn Greene, M.D., Chairman of the KMA Continuing Medical Education Committee, to discuss "Mandatory Medical Education", and Harold B. McGuffey, Commissioner of Insurance of the Commonwealth of Kentucky, speaking on "The Liability Insurance Problem in Kentucky".

A summary of the medical issues presented will be given by Hoyt D. Gardner, M.D., KMA President; a question and answer session between the experts and the physicians will follow.

The seminar will begin at 7:00 p.m., preceded by a social hour and dinner at the country club.

For more information, contact KMA Headquarters or the Boyd County Medical Society.

The American Philosophical Association has established a Committee on Philosophy and Medicine which will develop special programs at meetings of the American Philosophical Association. In addition, the Committee will distribute a newsletter including bibliographical and pedagogical information, lists of persons actively interested in philosophy and medicine, announcements of conferences, and other materials. Persons wishing to be on the Committee's mailing list should write providing the following information: Name, address, institutional affiliation, professional field, primary interests in philosophy and medicine (e.g., ethical issues in clinical medicine, epistemology of medicine, etc.), and any relevant teaching experience or plans (e.g., undergraduate course in medical ethics, lectures in nursing school, etc.). Enclose $2.00 to cover mailing costs. The Committee comprises H. Tristram Engelhardt, Jr. (University of Texas Medical Branch, Galveston), Holly Goldman (Michigan), Samuel Gorovitz (Maryland), John Ladd (Brown), Chairman, David Mayo (Minnesota, Duluth), and William Ruddick (NYU). Write to: Professor John Ladd, Committee on Philosophy and Medicine, Department of Philosophy, Brown University, Providence, Rhode Island 02912.

The Society of Nuclear Medicine has appointed F. H. Deland, M.D., Professor of Radiation Medicine at the University of Kentucky, as Editor-in-Chief of the *Journal of Nuclear Medicine*. Doctor Deland is a radiation physician and a nationally prominent specialist in nuclear medicine. A graduate of the University of Louisville School of Medicine, he is certified in both nuclear medicine and general and clinical pathology.

The Motion Picture Program Committee of the American College of Chest Physicians announces its "Call for Scientific Motion Pictures" on circulation, respiration, thoracic/cardiovascular surgery and related systems. Films submitted to the Committee will be reviewed for acceptance into the Motion Picture Program of the 41st Annual Scientific Assembly of the College, October 26-30, 1975, in Anaheim, California. There are no restrictions on the length of the films. Deadline for submission of films is May 30, 1975. For film application forms, write to: Constantine J. Tatooles, M.D., Chairman, Motion Picture Program, American College of Chest Physicians, 911 Busse Highway, Park Ridge, Illinois 60068.

SEND IN MEETING INFORMATION

Many medical orgnaizations are setting dates for their fall and winter meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to noitfy this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

WANTED

Chief Medical Officer to activate and direct a modern VA Ambulatory Care Clinic in Evansville, Indiana. Clinic will utilize many of the newest concepts in health care delivery and is scheduled to open soon.

Beginning salary up to $36,000 depending on qualifications. 30 days vacation, 15 days sick leave, educational opportunities and many benefits. Licensed in any state. An Equal Employment Opportunity employer. Contact Chief of Staff, VA Hospital, Marion, IL 62959. Tel. (618) 993-2151.

Letters To The Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

Again, this year I am compiling a Biting Insect Summary and would appreciate any case reports of unusual allergic reactions to biting insects, i.e., mosquitoes, fleas, gnats, kissing bugs, bedbugs, chiggers, black flies, horseflies, sandflies, deerflies, etc.

I would like physicians to supply me with case reports of those patients who have had unusual reactions to such insects. Include in your report the type of reactions and complications, if any, the age, sex, and race of the patient, the site of the bite(s), the season of the year, the immediate symptoms, the skin test results, desensitization results, if any, and any other associated allergies. Send this information to the following address.

Claude A. Frazier, M.D.
4-C Doctors Park
Asheville, N.C. 28801

LOUISVILLE: HURSTBOURNE/ PLAINVIEW AREA

High income level community of 78,000 (within two mile radius) with a desperate need for a Family Practitioner, OB-GYN physician, EENT physician, Internist and Ophthalmologist. We are builders and have a perfect location for lease. Contact SHERMAN & FLETCHER, Hurstbourne Medical Center, 304 Whittington Parkway, Hurstbourne Park, Louisville, Ky. 40222 or phone (502) 426-6300.

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

For those of you — the front-line, the firing-line, primary physician — who missed Robert H. Moser's ruminations "The First Five Minutes" in *JAMA* (231:1169, 17 March '75) recently, go back and read it! Sensible philosophy, humour, and wisdom aplenty is contained therein. Three paragraphs were outstandingly impressive:

> "I cherish the opportunity to speak to my patients. The first five minutes is the most precious interval in the entire interview. I do not want to have to glance up from a computer printout as I address my patient. I want eyeball-to-eyeball contact. I want to listen to the inflection of voice. I want to evaluate nuances of word, turn of phrase. I want to study body language, facial expression, skin color, sweat, sequence of thought and the myriad other messages, subliminal and overt, that pass between human beings.
>
> "And believe me, if this is done by some other person or by some machine — the initial energy of the interview is 'siphoned off'. The patient is no longer fresh; he is rechewing the cud of the history, and it is never as tasty the second time around.
>
> "Some authors have written about 'pattern recognition' — clinical instinct that enables the clinician to gather information from scores of little messages that contribute to his recognition of patterns, which are translated into diagnostic impressions. And there is no computer that can do that — to my knowledge."

Arthur Hugh Clough (1819-1861), an English poet and teacher, wrote "The Latest Decalogue" which goes like this:

> Thou shalt have one God only; who
> Would be at the expense of two?
> No graven images may be
> Worshipped, except the currency.
> Swear not at all; for, for thy curse
> Thine enemy is none the worse.
> At church on Sunday to attend
> Will serve to keep the world thy friend.
> Honor thy parents; that is, all
> From whom advancement may befall.
> Thou shalt not kill; but needst not strive
> Officiously to keep alive.
> Do not adultery commit;
> Advantages rarely come of it.
> Thou shalt not steal: an empty feat
> When it's so lucrative to cheat.
> Bear not false witness; let the lie
> Have time on its own wings to fly.
> Thou shalt not covet, but tradition
> Approves all forms of competition.

Clough's sixth commandment addition has definite relevance to our current concern with the right to die, living wills, organ transplantation, and the definition of death.

Watch for the

August Journal

for

complete details

on the

1975 Annual Meeting

September 23-25

- Complete Scientific Program
- Reference Committee Activity
- KEMPAC Seminar
- Technical Exhibits
- Special Features

PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

ROERIG Pfizer

A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp.=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

One prescription can economically treat the entire family.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

NSN 6505-00-148-6967

Pinworms, roundworms controlled with a single, non-staining dose of

ANTIMINTH®

(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

*Data on file at Roerig

Please see prescribing information on facing page.



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

CASE 7-72. This 34-year-old married, white, Gravida 7, Para 6, was under the care of a physician. She had a weight gain of 8 lbs.

She was admitted to the hospital on January 15, 1972 in labor. Her membranes had ruptured spontaneously at home. On examination at admission her cervix was found to be completely dilated with the head on the perineum. Her physician was notified. He administered a saddle block with xylocaine. The fetal heart was slow, 70 per minute just before the spontaneous delivery at 3:12 p.m. of a 5 lb 4 oz girl, in good condition. The placenta delivered spontaneously at 3:15 p.m. and there were no lacerations.

Some of the history had been subsequently obtained from the husband. He stated he had the flu about two weeks ago and his wife had mild symptoms several days before delivery; however, she had no fever and as far as he knew she hadn't been very sick.

She had a past history of rather heavy smoking and coughing; however, a chest X-ray in the last year had not shown any significant change. Following the delivery the husband spoke to the patient and she apparently was well. She was returned to the maternity floor. She received Phenergan expectorant and intermittent positive pressure treatments for her cough.

At 8:00 p.m. her temperature was 102°, and she received aspirin for this. Following this she was ambulating. She complained of some sleeplessness. At 4:00 a.m. her temperature was 98°. At 9:00 a.m. she was noticed to be perspiring profusely; she had no chills. She was seen by her attending physician, who ordered her transferred to the medical floor and asked an internist to see her. The impression was right lower lobe pneumonia. He treated her with antibiotics—Minocycline Hcl 200 mg stat and then B.I.D., nasal oxygen, expectorant, continued intermittent positive pressure respiratory therapy, IV fluids. Sputum culture revealed pneumococcus type III.

When she was seen again at 6:00 p.m. she was worse, and thought to have a fulminating bilateral pneumonia with consolidation. A surgical consultant saw the patient for a tracheostomy. While this was being performed under local anesthesia she went into cardiac arrest and failed to respond to all resuscitation. She expired at 9:05 p.m. on January 16. An autopsy was performed with the final diagnosis:

Severe confluent lobular and lobar pneumonia of both lungs
Fibrinopurulent pleurisy of both lungs
Emphysema and fibrosis of the lungs—slight
Congestion of the liver
Reactive hyperplasea of the spleen
Post-partum uterus
Acute tracheobronchitis
Recent tracheostomy wound.

Comment

The Committee classified this death as an indirect obstetrical one. The Committee commented that this was indeed a most unusual fulminating pneumonia, that one rarely sees. It is felt that perhaps more vigorous antibiotic therapy might have been beneficial, and that possibly this patient was sicker than was appreciated on first admission.

DYAZIDE®

Trademark

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

makes sense in edema.*



Neither inconvenient, unpalatable, expensive potassium supplements nor special K^+ rich diets are needed as a rule. Just 'Dyazide' once or twice daily for control of edema.

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

*Indications: Edema associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. Also, mild to moderate hypertension.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

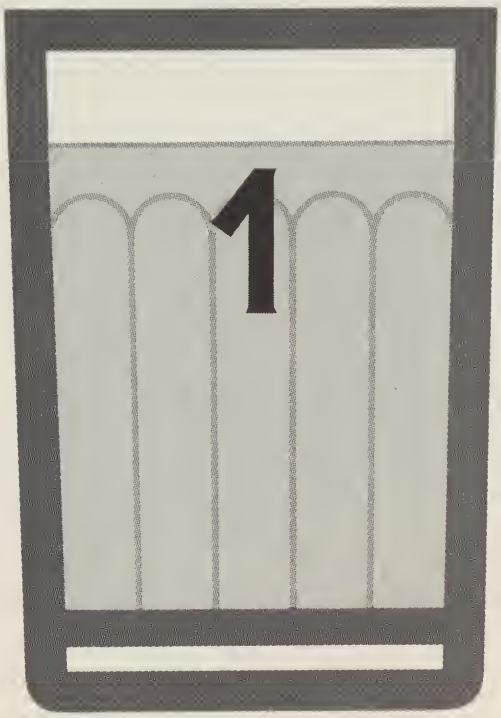
Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

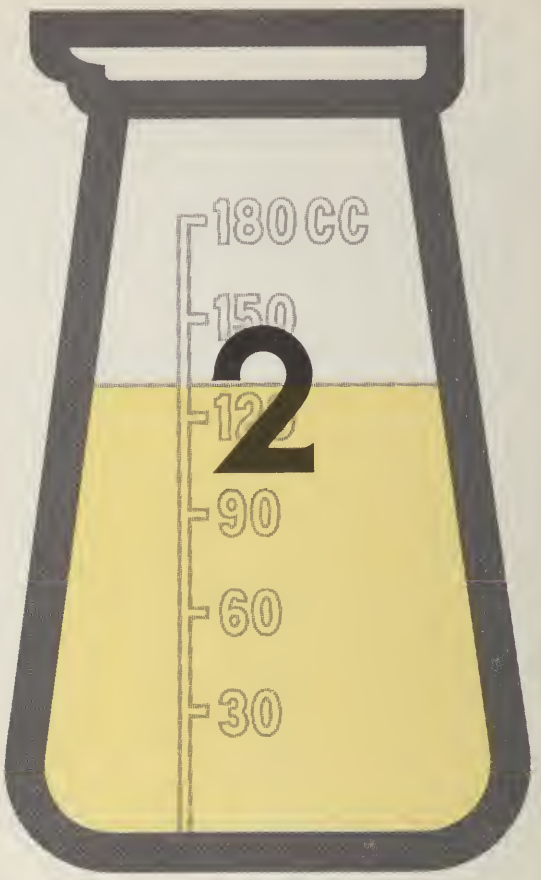
Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

'Dyazide' gets excess water and salt out and helps keep essential potassium in.

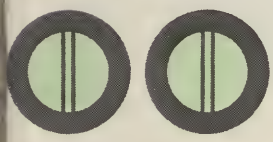




Adequate fluid intake

Frequent voiding

The 3rd Basic



Gantanol® (sulfamethoxazole) B.I.D.

Four tablets (0.5 Gm each) STAT- then 2 tablets B.I.D. for 10-14 days

Basic therapy with convenience for acute nonobstructed cystitis

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic non-obstructed urinary tract infections (primarily pyelonephritis, pyelitis, and cystitis) due to susceptible organisms. ***Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials, including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

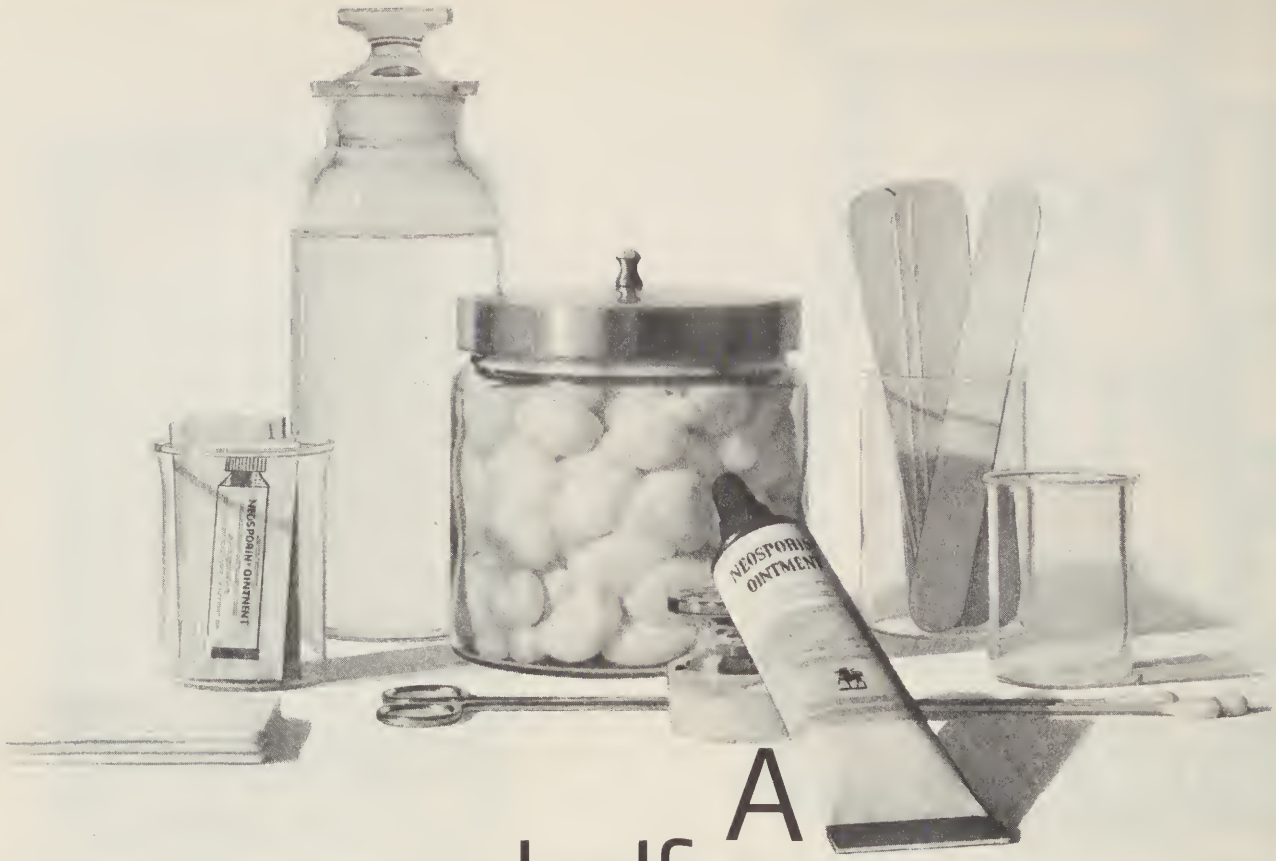
Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

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Use it to prevent a topical infection. Or to treat one that's already started. In either case, it's good medicine. Whether for lacerations, burns, open wounds, IV catheter or surgical aftercare. Neosporin® Ointment provides broad antibacterial coverage against common susceptible pathogens. And since it contains three antibiotics that are rarely used systemically, the risk of sensitization is reduced. Neosporin Ointment. A half-ounce of prevention. Also available in a full ounce of prevention and in convenient foil packets.

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(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs.
In tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically,* used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

Wellcome / **Burroughs Wellcome Co.**
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Disruptive anxiety usually meets its match here.

• Often effective when reassurance and counseling are insufficient.
• Three dosage strengths to meet most therapeutic needs.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

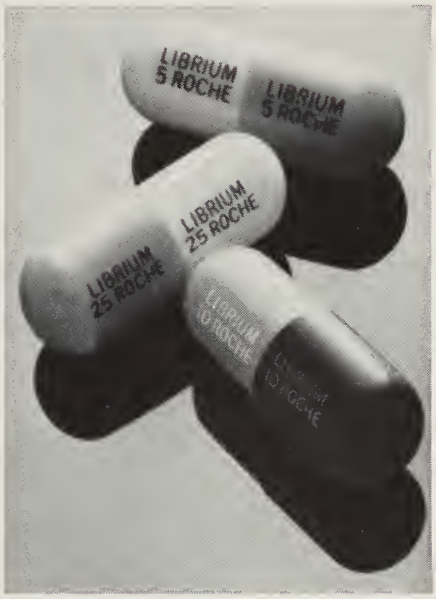
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions:

ORAL: In the elderly and debilitated and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six.

INJECTABLE: Keep patients under observation, preferably in bed, up to three hours after initial injection; forbid ambulatory patients to operate vehicle following injection; do not administer to patients in shock or comatose states; use reduced dosage (usually 25 to 50 mg) for the elderly or debilitated and for children age twelve or older.

ORAL AND INJECTABLE: Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating compounds such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual



precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

With the injectable form, isolated instances of hypotension, tachycardia and blurred vision have been reported; also hypotension associated with spinal anesthesia, and pain following I.M. injection.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral: Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

For Parenteral Administration: Should be individualized according to diagnosis and response. While 300 mg may be given during a 6-hour period, do not exceed this dose in any 24-hour period. To control acute conditions rapidly, the usual initial adult dose is 50 to 100 mg I.M. or I.V. Subsequent treatment, if necessary, may be given orally. (See Precautions.)

Supplied:

Oral: Librium® (chlordiazepoxide HCl) *Capsules*—5 mg, 10 mg, 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50, available singly and in trays of 10.

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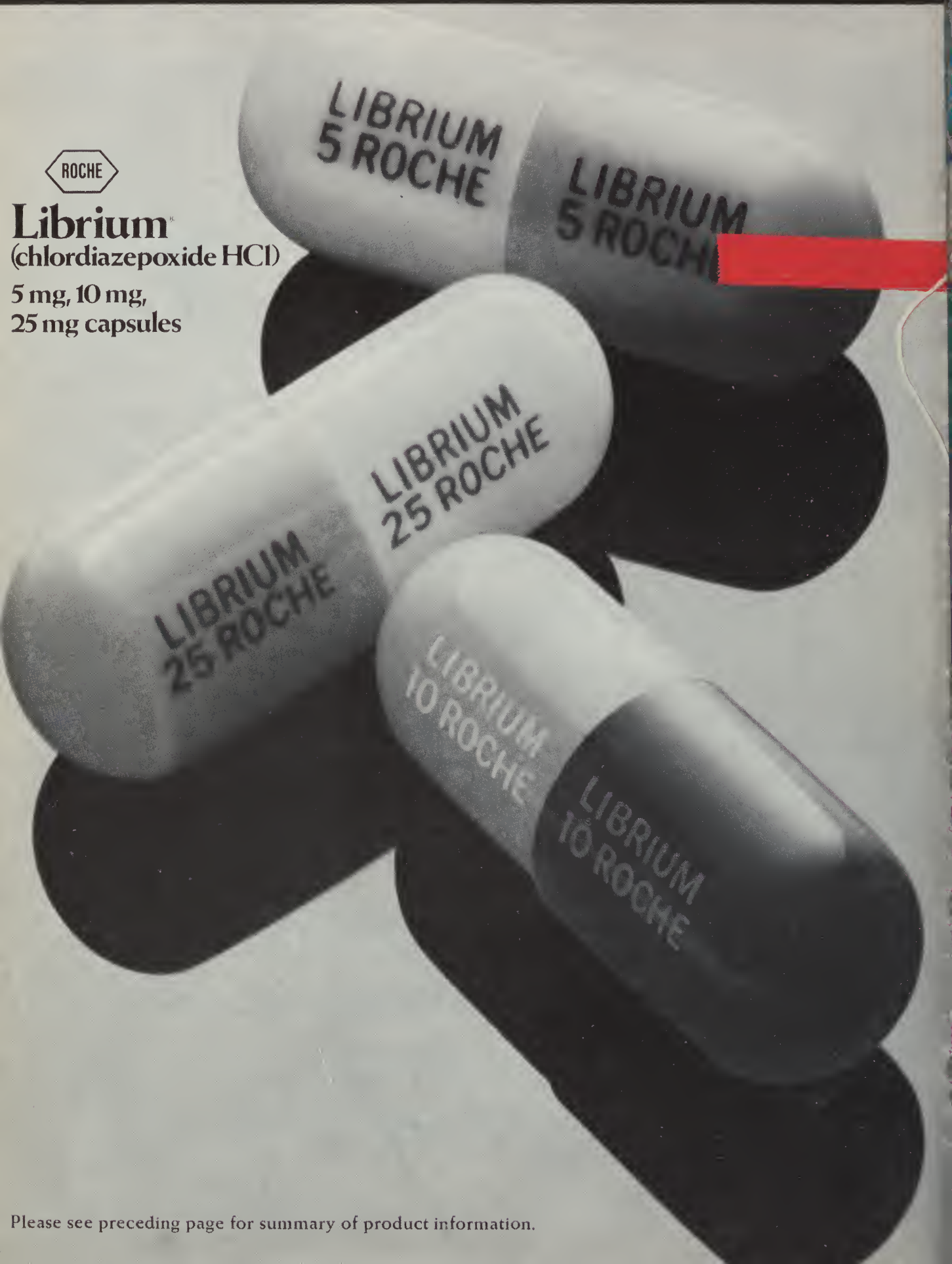
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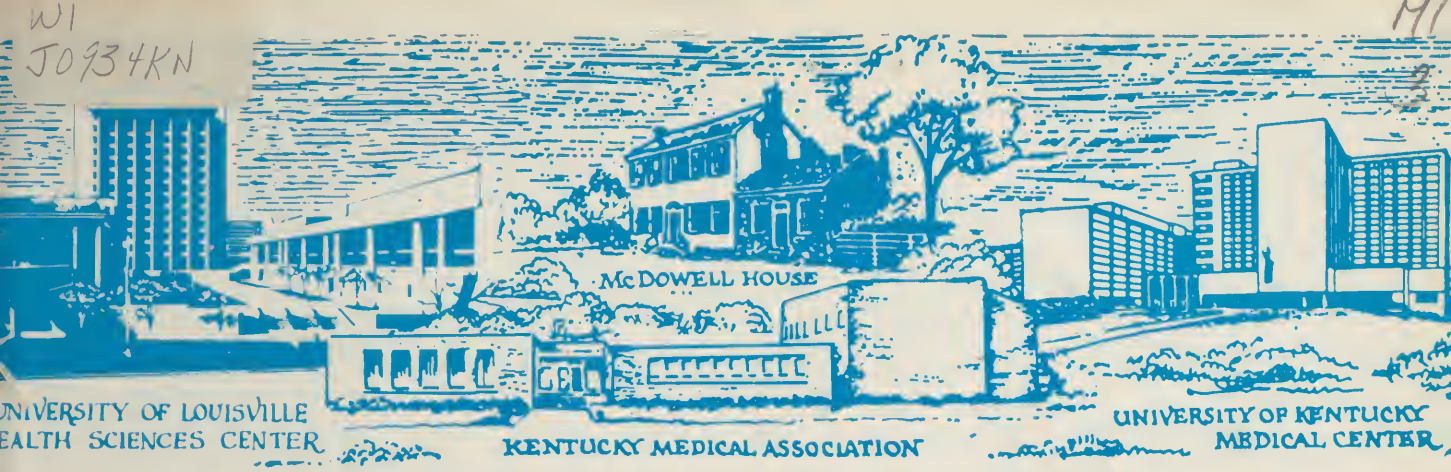
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Please see preceding page for summary of product information.

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

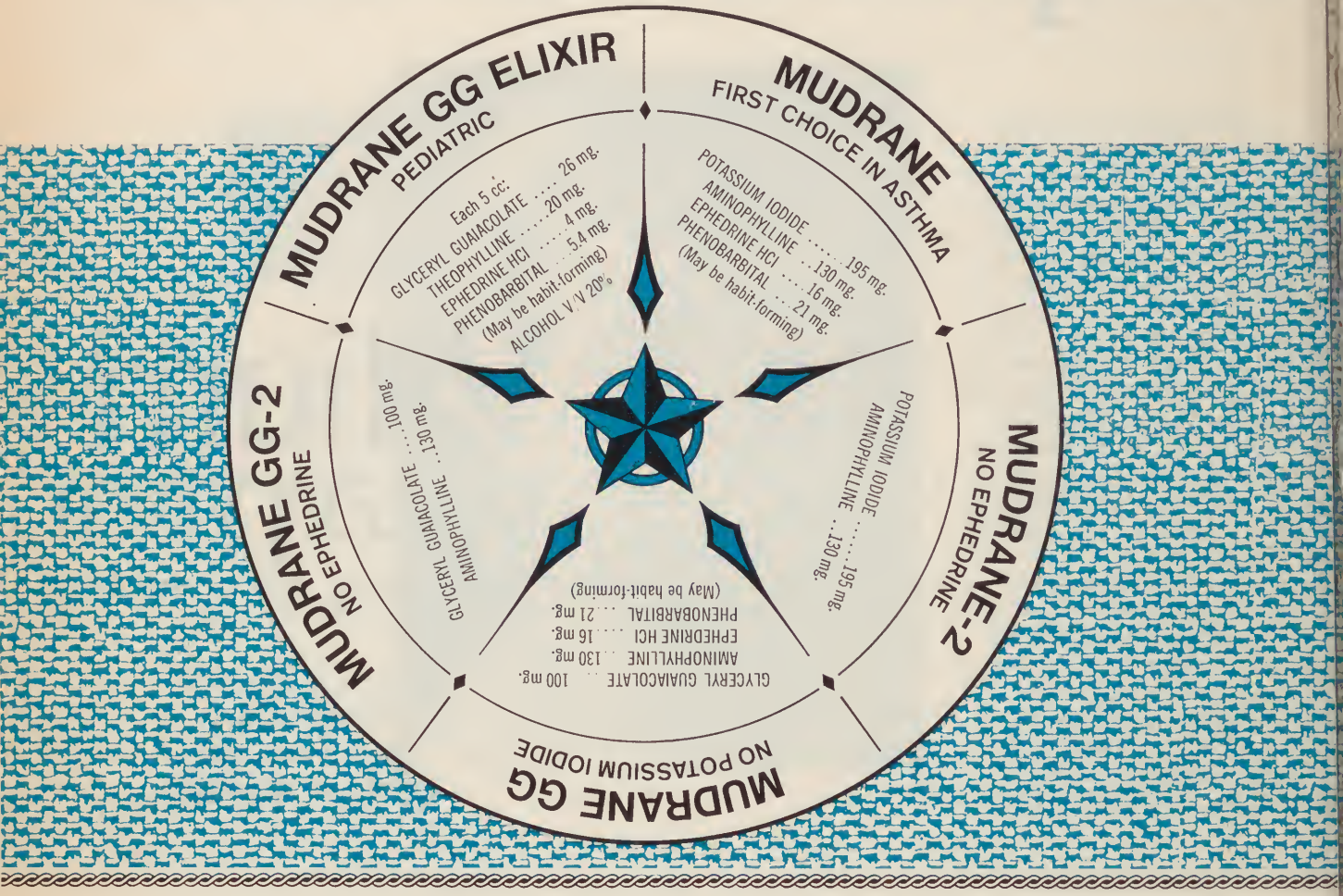
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

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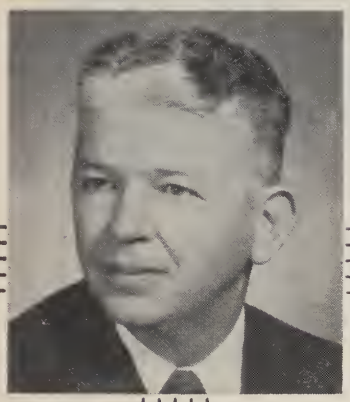
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MESSAGE FROM THE PRESIDENT

THE topic of conversation among the coffee shop conferences in the past few months concerns the problem of malpractice insurance. The most frequently asked questions concerning this problem are: What is being done about it by the AMA? What is being done about it by the KMA? Why the necessity for the tremendous premiums for malpractice insurance? Why the lack of availability of insurance by an increasing number of physicians not only in Kentucky but nationally?

If one reads the Jefferson County and state bulletins, it should be very obvious to all that your local county and state medical societies and the AMA are exerting every effort to solve this momentous problem. A list of conferences held by the state and national medical societies reads like a "Who's Who" in insurance circles and medical committees. From the multiple meetings held it has become quite obvious to all concerned that there is no satisfactory method available to cover the entire segment.

On a national level, the President of AMA and the Chairman of the Board of AMA have testified to Congress that this should not be a federal problem. At the present time no satisfactory method has been devised and many states are in the process of forming some type of state malpractice program and it is obvious to all, I believe, that it should be accomplished post-haste.

Your committees on malpractice on state and national levels are working untiringly in your behalf in this regard. You should attend conferences on malpractice in your locality and contribute as much as you possibly can to solving the basic problem. You are the ones who may not have malpractice coverage until the problem is satisfactorily resolved.

J. THOMAS GIANNINI, M.D.
SENIOR DELEGATE TO THE AMA

This is the second in a series of articles written at the request of KMA President Hoyt D. Gardner, M.D.



POSTGRADUATE OPPORTUNITIES



IN KENTUCKY

JUNE

21 National Association of Children's Hospitals and Related Institutions, Galt House, Louisville

22 American Society for Photobiology, Louisville

26 PAS Regional Quality Assurance Workshop, Louisville

26 Hypertension 1975,* UK Medical Center, Lexington. Fee: $20

27-28 Evaluation & Management of Cardio-Pulmonary Emergencies,* UK Medical Center, Lexington. Fee: $75

JULY

17-18 KAFP Lake Barkley Seminar, Cadiz

SEPTEMBER

23-25 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

OCTOBER

27-31 Gerontological Society, Galt House, Louisville

IN SURROUNDING STATES

JUNE

8-13 American Academy of Facial Plastic & Reconstructive Surgery, Chicago

14-19 AMA Annual Convention, Atlantic City, N.J.

23-25 "Critical Care—Postgraduate Course in Clinical Assessment for Nurses & Physicians," Hyatt Regency Hotel, Nashville. Fee: $115.

JULY

4-5 Society of Phillipine Surgeons in America, King's Island Inn, Cincinnati

21-26 Current Concepts in Radiology, Atlantis Lodge, Atlantic Beach, North Carolina

23-Aug. 1 "Human Sexuality", Institute for Sex Research, Indiana University, Bloomington. Fee: $285

AUGUST

18-21 American Hospital Association, Chicago

OCTOBER

6-9 American Academy of Family Physicians, Palmer House, Chicago

7-12 Society for Clinical & Experimental Hypnosis Annual Scientific Program & Workshops, Center for Continuing Education, University of Chicago

20-21 Tennessee Valley Medical Assembly, Read House, Chattanooga

SEND IN MEETING INFORMATION

Many medical orgnaizations are setting dates for their fall and winter meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to noitfy this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

KMA Annual Meeting

September 23-25

Ramada Inn/Bluegrass Convention Center
Louisville

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*For information, contact: Frank R. Lemon, M.D., Associate Dean of Extra-Mural Affairs, UK College of Medicine, Lexington 40506

**Contact: Gerald D. Swim, Director, Office of Continuing Education, University of Louisville School of Medicine

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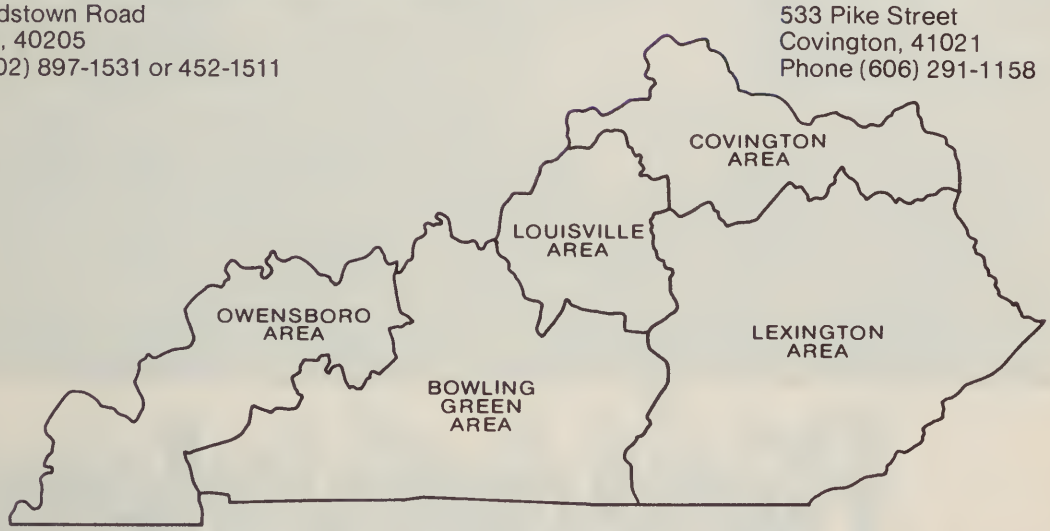

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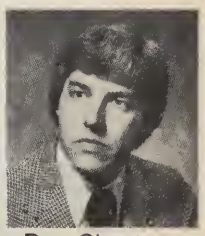
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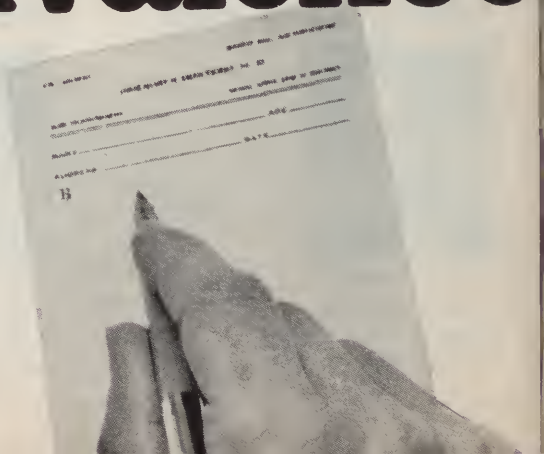

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Bioequivalence



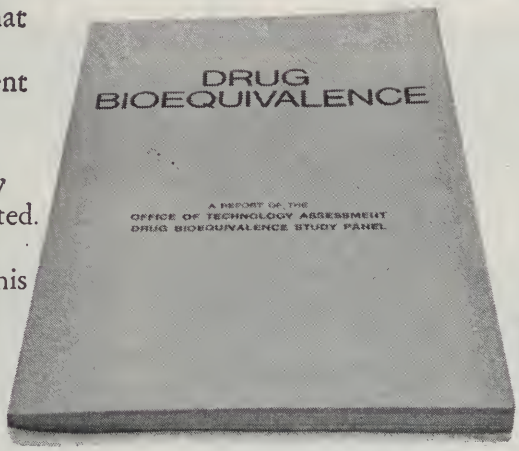
the weight of scientific opinion:

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"...the problem of bioinequivalency in chemically equivalent products is a real one. Since the studies in which lack of bioequivalence was demonstrated involved marketed products that met current compendial standards, these documented instances constitute unequivocal evidence that neither the present standards for testing the finished product nor the specifications for materials, manufacturing process, and controls are adequate to ensure that ostensibly equivalent drug products are, in fact, equivalent in bioavailability.



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(a) chemical equivalence; and

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Arteriography in the Evaluation of Acute Gastrointestinal Bleeding

VICTOR J. DIORIO, JR., M.D.*

Louisville, Kentucky

In patients who present with the clinical picture of acute gastrointestinal bleeding, percutaneous catheter arteriography has been found useful in both pinpointing the bleeding site and in some cases controlling blood loss.

THE evaluation of G.I. bleeders is a relatively common clinical and radiological problem. Frequently it is a pressing problem that requires prompt diagnosis with immediate treatment to be lifesaving. Sometimes the problem presents as a diagnostic dilemma that spans many months or years without the actual cause being demonstrated. Angiography has frequently been found useful in both of these instances.[1-3] This discussion, however, will concern itself with those G.I. bleeders who present as acute G.I. bleeding emergencies.

Materials and Method

In anticipation of requests for angiographic evaluation of G.I. bleeders, a set of requirements that had to be fulfilled before the exam would be done was established. These are the requirements:

1. The patient should be considered in shock by the attending physician or he must have had at least two units of blood in the last 24 hour period to attempt to maintain a stable Hgb and Hct.

2. The patient is to be accompanied to the x-ray department by a responsible physician who will monitor the vital signs and administer drugs and blood or plasma expanders as needed. This stresses the team approach to this type of exam. It allows the radiologist to remain sterile and perform his job quickly, while the needs of the patient are being monitored by another physician.

3. There is no history of allergy to iodine.

4. The patient or responsible person gives consent for the exam.

5. There is no barium in the G.I. tract.

6. A nasogastric tube should be placed in the stomach and aspiration performed. If blood is returned the tube is left in place for air insufflation.

7. If possible endoscopy is preferred before angiography.

If these requirements are fulfilled, then the patient is brought to the x-ray department. Under local anesthesia, a percutaneous arterial catheterization utilizing the Seldinger technique is carried out.[4] An abdominal aortogram is performed first to serve as a guide and to determine the patency of the visceral arteries. Occasionally the bleeding site might be found on this injection. If the preangiographic workup suggests the colon as the most likely site of bleeding, the inferior mesenteric artery is selected first, followed by the superior mesenteric artery. If needed, a celiac injection will be

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made. If the upper G.I. tract is suspected, the celiac and superior mesenteric arteries are catheterized. If the site is demonstrated and pharmacologic control is anticipated the catheter is sewn in place and secured to avoid kinking. Vasopressin is the drug which seems to be best and is the one we have used. A Harvard pump is used for the infusion of the vasopressin solution. The recommended concentration of vasopressin is 0.1-0.2 units per minute but sometimes this concentration may need to vary slightly. A repeat angiogram after about 20 to 30 minutes of infusion is recommended to determine the response. Intermittent infusions may then be carried out over several days as necessary through the indwelling catheter.

Case Reports

Case #1. MBB, a 71-year-old female, was admitted to Norton Memorial Infirmary on December 21, 1972, with massive rectal bleeding. She was found to be passing bright red blood and clots. She was in mild shock. Previous pertinent history included surgery for a duodenal ulcer in 1955 and at least two episodes of G.I. bleeding thought probably to originate from a diverticulum of the colon. She required three units of blood over a 24 hour period and was still bleeding and hypotensive. Angiography was performed and the bleeding site was demonstrated (Figure I). She was taken to surgery where a segmental resection of colon was done with control of the bleeding. Recovery was uneventful.

Case #2. AMcC, a 64-year-old male, was admitted to Norton Memorial Infirmary on January 22, 1973, for G.I. bleeding. He was found to have a duodenal ulcer. He was treated conservatively and discharged on February 2, 1973. He was readmitted about ten days later for G.I. hemorrhage and underwent surgery with a hemigastrectomy, vagotomy and Billroth II gastrojejunostomy being performed. Six days later the patient had an episode of emesis of fresh blood and clots. His stool was tarry and he was in mild shock. An emergency angiogram was carried out and a small bleeding point was demonstrated along the gastric suture line. This was so small that it was felt to be subsiding, possibly due in some part to a tamponade effect of the clot-filled stomach pouch. Surgery was not done at this time and with further conservative management he was noted to stop bleeding, and subsequently was discharged without a further episode of bleeding.



FIG. 1
Arterial phase of selective inferior mesenteric arteriogram reveals extravasation of opaque material from bleeding diverticulum of the descending colon

Case #3. RHB, a 70-year-old male, was admitted to Norton Memorial Infirmary on May 16, 1973, with massive G.I. bleeding. He had a diagnosis of gastric ulcer and diverticulosis in the past. At least two units of blood were administered on May 17, but this did not prevent progression of shock with syncope. An emergency angiogram revealed a bleeding site at the hepatic flexure in the colon and this was thought to be from a diverticulum. Surgery was carried out immediately with control of the blood loss. The gastric ulcer was resected by wedge resection at the same time. The patient was subsequently discharged without a further bleeding episode.

Case #4. JMcI, a 77-year-old male, was admitted to Norton Memorial Infirmary on May 27, 1973, because of the passage of black tarry stool with occasional passage of red blood per rectum. The patient was a known alcoholic and gave a history of recent heavy intake of alcohol. His Hbg and Hct dropped over the first four days of his admission from 12.6 gm and 35.9% to 8.3 gm and 23.5%, respectively.

In spite of administration of two units of blood over 24 hours the patient's pressure continued to drop. An angiogram revealed a bleeding site near the hepatic flexure in the colon. Surgery was then carried out with a right colon resection and ileo-transverse colostomy being performed. The postoperative course was complicated by a wound dehiscence and further complications from which the patient subsequently expired. There was no G.I. bleeding in the post-operative period however.

Case #5. OJ, a 60-year-old female, was admitted to Norton Memorial Infirmary on September 21, 1973, for a pelvic exenteration because of recurrent carcinoma of the cervix. Surgery was performed on September 24, 1973. On October 13, 1973, while still hospitalized, she developed G.I. bleeding with a drop in Hgb and Hct. Packed cells and albumin were administered over the next three days with a minimum of two units of packed cells used each day. An angiogram was then requested to establish the site of bleeding and vasopressin infusion was contemplated if it could be found rather than operative intervention. There was no bleeding site identified. The only vessel supplying the abdominal viscera was the

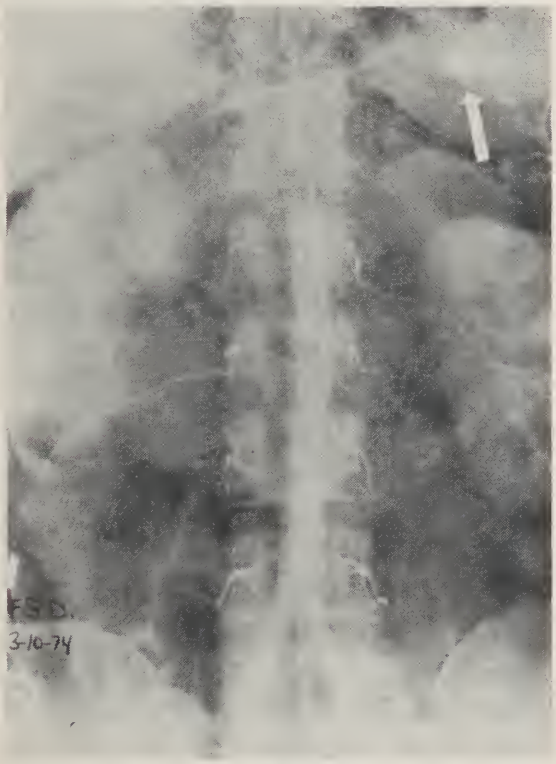


FIG. 2
Puddling of opaque material in the gastric fundus secondary to bleeding from branches of the left gastric artery

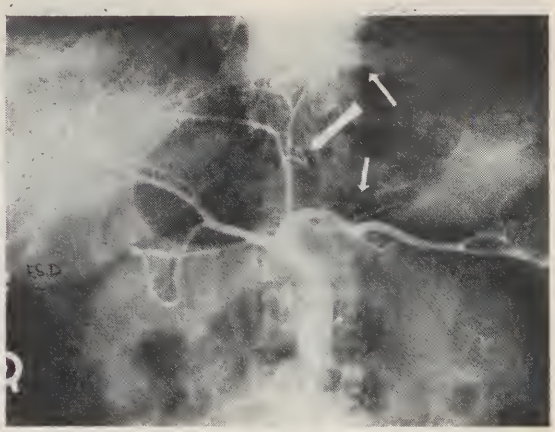


FIG. 3
Selective celiac arteriogram (early arterial phase) showing the left gastric artery (large arrow) and several of its smaller branches

superior mesenteric artery. After consultation with the attending physician it was decided to perfuse this vessel with vasopressin for 24 hours to insure cessation of bleeding from the G.I. tract. This was done and the patient's signs and symptoms of blood loss disappeared. She was subsequently discharged without further difficulty.

Case #6. DWG, a 54-year-old male, was admitted to Norton Memorial Infirmary early on the morning of October 28, 1973. That morning the patient passed a large quantity of bright blood per rectum which was associated with syncope. There was a history of repeated episodes of passage of blood per rectum for two days prior to admission. There was a past history of a sigmoid colon resection for diverticulitis. The patient was considered to be in shock by the attending physician. He suspected a bleeding diverticulum as a cause for this hemorrhage and requested an emergency angiogram. There was no bleeding site demonstrated and on conservative management it was found that he indeed had stopped bleeding. He was discharged on November 1, 1973.

Case #7. RWD, a 72-year-old male, was admitted to Norton Division of Norton-Children's Hospital on March 3, 1974. He had been admitted to a local hospital in Madison, Indiana, for hematemesis which began 36 hours prior to his admission here. This became worse during that time and when transferred here he was found to be in shock. He responded to the initial therapy. Fiberoptic endoscopy was carried out and diffuse bleeding from esophagitis with ulceration was found along with gastritis. He had a large hiatal hernia as well. The

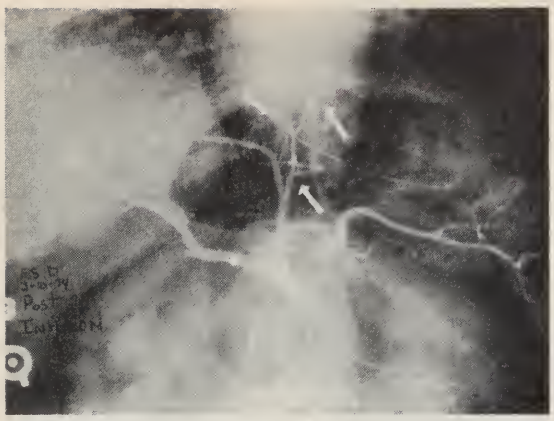


FIG. 4
Arterial spasm (small arrows) with cessation of gastric bleeding following 20 minutes infusion of vasopressin

patient had a cholecystectomy done several weeks before in January. Due to the patient's condition it was felt that angiography with vasopressin infusion would be useful as an alternative to surgery to arrest this patient's blood loss. The angiogram did not reveal a discrete bleeding site; however, due to the endoscopic findings, it was decided to perfuse the celiac artery with vasopressin. The patient's upper G.I. aspirate cleared within 24 hours and the perfusion was stopped. There was no recurrence of the GI bleeding and he was subsequently discharged.

Case #8. OB, a 73-year-old female, was admitted to Norton Division of Norton-Children's Hospital after arrival at the emergency room unresponsive and in shock. She responded to the initial therapy to correct hypovolemia. Nasogastric aspirate was clear but the rectum contained dark bloody stool. An upper G.I. series revealed a gastric ulcer, and a barium enema revealed diverticula. The patient appeared to stabilize. Suddenly she became shocky and her Hgb dropped. One unit of blood was given immediately and she was typed and crossmatched for six more units. An emergency angiogram was requested and there was no bleeding site demonstrated; it was felt that she was no longer actively bleeding. Conservative management was instituted; following the angiogram no further blood loss was evident and she was subsequently discharged.

Case #9. FSD, a 68-year-old male, was admitted to Norton Division of Norton-Children's Hospital on March 8, 1974, following passage of liquid black stool preceded by a strong urge to defecate. He subsequently had a solid tarry stool. Acid neutralization was started; however, massive upper G.I. bleeding began and he failed to respond to attempts to keep up with his blood loss. Angiography was performed and bleeding from the gastric fundus was demonstrated that was brisk and coming from branches of the left gastric artery (Figures 2-4). Vasopressin was infused into the celiac artery and a repeat angiogram after 20 minutes revealed a good response with cessation of bleeding. The catheter was left in the celiac artery and intermittent perfusion for 24 hours was carried out. The patient responded with a cessation of bleeding. He stabilized and subsequently was discharged without further bleeding.

TABLE 1

Pt.	Bleeding Site Found	Management	Continued Bleeding
MBB	+	Surgery	–
AMcC	+	Conservative	–
RHB	+	Surgery	–
JMcl	+	Surgery	–
OJ	–	Vasopressin	–
DWG	–	Conservative	–
RWD	–	Vasopressin	–
OB	–	Conservative	–
FSD	+	Vasopressin	–

Results

Of the nine patients who have met the criteria established, a bleeding site was identified in five (Table 1). Prompt control of the blood loss was achieved by surgery or vasopressin infusion in four. In the fifth patient watchful waiting was considered worthwhile because the bleeding site showed only a small amount of extravasation and it was thought that his bleeding was decreasing, which it subsequently did.

Four of the nine patients that were evaluated failed to demonstrate a bleeding site. Surgery was therefore not performed. None of these patients continued to bleed and proceeded to stabilize and were subsequently discharged.

There were no complications resulting from the arterial catheterization or the pharmacological control. One patient died of postoperative complications.

Discussion

Angiographic evaluation of G.I. bleeders evolved as many new diagnostic studies, that is, in the quest for a better method. It has been reported that conventional radiographic techniques fail to demonstrate the potential source of hemorrhage in 20-30% of bleeding pa-

tients.[5] If an abnormality is demonstrated there is not complete assurance that it is the actual bleeding site, as frequently there may be more than one potential bleeding site demonstrated.

Many studies other than conventional radiography have been utilized to determine the site of bleeding in these patients. Some of these studies such as the fluorescein string test and isotope studies are now considered to be less desirable because they are relatively inaccurate and sometimes time-consuming. Endoscopy used to have limitations which have largely been overcome by the development of the fiberoptic scope. This tool is now considered an excellent means of evaluating acute G.I. bleeders, most notably those whose site of origin is thought to be the upper G.I. tract. Even this diagnostic tool, however, has some limitations.[6]

Frequently, after utilizing all of these diagnostic tools, the site of G.I. bleeding may not be located and an exploratory laparotomy has to be done. Technical problems involved in the exploration of the G.I. tract when it is filled with blood make it impossible for the surgeon to find the site of bleeding in 20% of patients with upper G.I. hemorrhage and in 70% of patients with melena.[7] In the colon it is frequently more difficult. As a result, quite often, "blind" partial or complete gastrectomies and colectomies are performed only to find that the bleeding may continue after surgery. It has been reported that bleeding sometimes stops during anesthesia only to begin again after the patient awakens.[8] This could further add to the surgeon's dilemma.

Because of the mortality rate which may range from about 45-50% in G.I. bleeders who are over 60 years of age and because of the limitations of the other means of evaluation mentioned earlier, the potential of angiography in this problem was considered. In 1960, Margulis reported the successful use of operative angiography in a patient with a cecal AV malformation.[9] Three years later Nusbaum and Baum reported the successful demonstration of experimentally produced bleeding points in dogs with percutaneous selective mesenteric angiography.[10] In 1965 they published their initial clinical experience using this technique.[1] In the past eight years there has been increasing use of this diagnostic approach in many centers. Various reports during this time mention rates of success varying from 50-75% in defining the site of active G.I. bleeding.[11]

For angiography to be successful in demonstrating the site of bleeding, the patient has to be bleeding actively. It was probably the difference in individual angiographers' opinions as to what constitutes active bleeding based on the clinical and laboratory findings that produced the variation in results. Bleeding into the G.I. tract at a rate of 6 cc per minute has been found to show as extravasation on an abdominal aortic injection. There has been some difference in the results on laboratory animals regarding the rate of bleeding necessary to produce extravasation on selective catheterization of a visceral artery. One investigator found that 2 cc per minute was the slowest rate of bleeding that could be detected while another group found that as little as 0.5 cc per minute could be detected.[12,10]

In the clinical setting it is not possible to take a patient just recently admitted and know the rate at which the blood is being lost. On the basis of the clinical picture, however, patients will fall into two major categories. There are those who are in shock and those who are not. In the first or shock group, we have two subgroups: those who are hemorrhaging so severely that the time needed to perform the angiographic procedure cannot be taken, and those who seem to respond to the initial treatment to control shock. A high correlation between the presence of shock and angiographically demonstrated bleeding sites has been found and, if surgery can be delayed, there is a good chance that the bleeding site can be localized. Once this has been accomplished either pharmacological or mechanical control of the bleeding site by infusion of vasopressin or clot material through the catheter may be attempted. If surgery is performed after angiographic localization then the procedure can frequently be much less extensive and it may be done in less time.

In that group of patients who are not in shock, selection of patients who might benefit from the angiographic study may be a little more difficult. One study found that if the clinical signs and symptoms of shock alone were the only requirements for selection of patients for angiography, then 34% of angiographically demonstrated bleeding sites would be missed.[11] Here it becomes necessary to try and utilize the laboratory work in animals

and convert it to useful clinical terms. If we take the slowest reported blood loss per minute, that is, 0.5 cc per minute, and project this to 24 hours we get a blood loss of 720 cc, or about one and one half units of blood. At 2 cc of blood per minute the 24 hour loss would be 2880 cc, or about six units of blood. One can therefore determine the number of units of blood necessary to try and maintain a stable Hbg and Hct over a 24 hour period to guide them in their selection of patients. We have elected to use the results which suggest that 0.5 cc/min can be detected by selective angiography and therefore only require replacement of two units of blood over a 24 hour period.

Summary

A set of seven criteria stressing a team approach to the angiographic evaluation of nine patients with emergency G.I. bleeding proved very useful. In five of the nine patients the bleeding site was identified and blood loss controlled. In four of the nine patients studied no bleeding site was found and following the procedure there was no further evidence of blood loss.

Acknowledgement

The angiographic procedure in Cases #4 and #5 was performed by a partner, J. Kenneth Allen, M.D.

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Fournier's Gangrene of the Scrotum and Penis: A Case Report

HARRY O. DEBANDI, JR., M.D.*
Madisonville, Kentucky

A 56-year-old Caucasian with hepatic cirrhosis developed idiopathic gangrene of the scrotum and penis. He was treated by debridement and antibiotics. Recovery was rapid despite hypoproteinemia, again attesting to the remarkable regenerative ability of the scrotum.

IN 1885, Fournier described a fulminating gangrenous process which was limited to the scrotum and/or penis with no apparent predisposing cause.

Tan[1] reported three cases of scrotal gangrene occurring in Indonesia in 1964, but all had definite predisposing factors.

The last reported case of gangrene of the genitalia in the United States was by Thomas[2] in 1956, at which time he also reviewed the literature.

The regenerative capacity of the scrotum has been documented by previous case reports and is well known to urologists. The following case again attests to this ability even with hypoproteinemia due to far advanced liver disease.

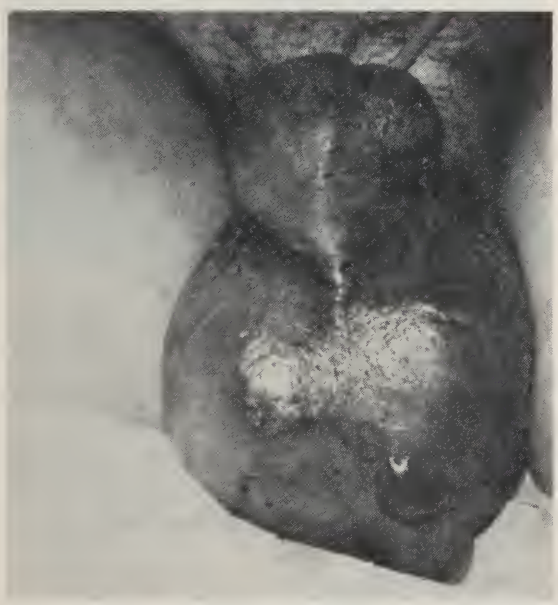


FIG. 1. Pre-operative

*From the Department of Urology, Trover Clinic, Madisonville
Paper received at KMA: 2-27-75

Case Report

B. W. was a fifty-six-year-old Caucasian who suffered from hepatic cirrhosis of increasing severity for several years.

He was admitted to the hospital on April 21, 1971, because of mild GI distress. His temperature was normal on admission, but 24 hours later spiked to 104°F. Evaluation by the admitting physician yielded no apparent cause for the pyrexia. He was given 3 million units of aqueous penicillin intravenously. The following day his temperature was still 103°F. Re-examination revealed discoloration of the frenulum of the penis and of the scrotum. Urologic consultation was requested.

Inspection of the patient revealed a seriously ill male who was toxic and delirious. Examination of the scrotum revealed a line of demarcation of apparent gangrene. An area of erythema with a similar gangrenous process was also present on the frenulum of the penis. The



FIG. 2. Post-operative

patient was given 10 million units of aqueous penicillin intravenously and observed for the next three hours. The process continued to advance (Fig. 1).

The nonviable areas of the scrotum and penis were debrided under local anesthesia (Fig. 2). The gross and microscopic findings were similar to those previously described by Thomas.[2] The wound was dressed with adaptic gauze and sterile towels. He was maintained on aqueous penicillin and in 12 hours he was alert, eating and afebrile.

Cultures taken from the blebs produced an anaerobic streptococcus.

The scrotum granulated rapidly despite a hypoproteinemia of 4.3 gm of protein with 1.6 gm of albumin. Granulation of the entire area was accomplished in three weeks (Fig. 3). At this time he was discharged.

Almost complete epithelialization occurred in two months (Fig. 4).

Unfortunately, this patient died of hepatic coma three months after his initial surgery.

Comment

Because of the edema and ascites, prolonged exudation and fluid loss were anticipated. However, granulation and wound healing were rapid and no problem was encountered.

One wonders if this entity is not related to purpura fulminans, another gangrenous process associated with the streptococcus organism.

Acknowledgement

William Klompus, M.D., contributed to the preparation of this report.

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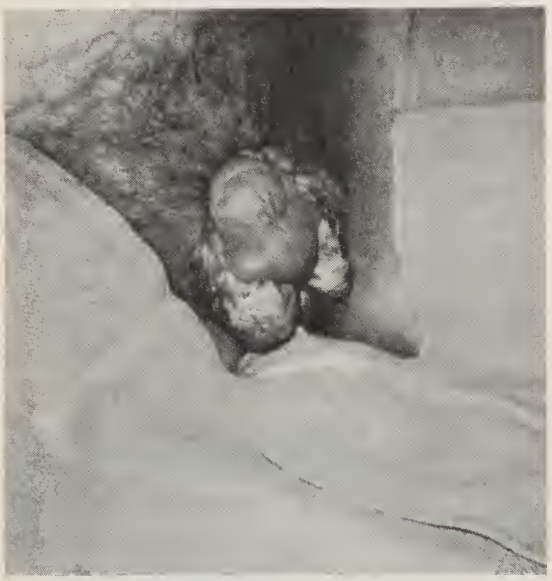


FIG. 3. Three weeks post-operative



FIG. 4. Eight weeks post-operative

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Helminth Parasites of Dogs from Kentucky: A Survey with Public Health Implications

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A survey made in Kentucky revealed that a reservoir of human infection exists in dogs infected primarily with Toxocara canis. Ingestion of the eggs of this helminth causes visceral larval migrans syndrome in man.

THERE are few helminths that infect both man and dogs. A single species seems to be adapted to either man or dogs. Many of these communicable diseases are receiving renewed attention as their role in human health becomes fully known. A few of these helminth infections are frequently encountered in general medical practice.[1] One such infection is caused by the helminth, *Toxocara canis,* a natural parasite in the intestines of dogs or cats. Most pediatricians are well aware of this infection since ingestion of *T. canis* eggs causes visceral larval migrans (VLM) syndrome in man and occurs primarily in children. This syndrome is characterized by chronic eosinophilia (↑50%), hepatomegaly, some degree of pulmonary eosinophilia infiltration, pneumonitis, and some degree of splenomegaly. Beaver et al.,[2] Burrows,[3] and others have described the clinical characteristics of this disease in detail.

The purpose of this study was to determine primarily the prevalence of *T. canis* in dogs from Kentucky and secondarily, other helminth parasites of zoonotic importance. The results of this survey are intended to alert physicians, veterinarians, and public health officials as to the status of these helminths as potential sources of human infection.

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Materials and Methods

During the spring and summer of 1974, dogs were examined for helminths from Madison, Jessamine, and Fayette counties. About half of the dogs were domestic from farms and the other half from the Lexington Humane Society. Both male and female dogs ranging in age from six weeks of age through adults were used.

In addition, a list of possible helminth parasites which might infect dogs in Kentucky was compiled and sent to 140 veterinarians throughout the state. Attached to the questionnaire was a request to list any other parasites encountered and the relative frequency for each parasite.

Autopsy procedures were according to Styles and Evans.[4] Fecal samples were examined according to Herrick.[5] The recovered parasites were placed in saline, identified, and preserved in 10% formalin.

Results and Discussion

The results from the autopsy and fecal examinations are shown in Table 1. The results from the veterinarians are shown in Table 2. Both studies indicate that *T. canis* is the most prevalent helminth parasitizing dogs in Kentucky with an infection rate between 40 and 56%. This high infection rate needs to be emphasized since most workers[4] are of the opinion that an incidence of 7% is hazardous to humans. Exacerbation of the problem exists when one considers that, according to Webb,[6]

TABLE 1
HELMINTH PARASITES RECOVERED FROM AUTOPSIES AND FECAL SAMPLES OF 90 KENTUCKY DOGS

Parasites	No. Dogs Infected	%
Toxocara canis	40	44
Taenia pisiformis	24	27
Ancyclostoma caninum	20	22
Dipylidium caninum	20	22
Trichuris vulpis	19	21
Physaloptera rara	13	14
Toxascaris leonina	2	2
No Infection	11	12

there are over 25 million dogs in the U.S. Furthermore, the infective larvae of dog hookworms such as *Ancylostoma* species and *Uncinaria stenocephala* have also been shown to cause cutaneous larva migrans[6,7] (CLM). The above two helminths were also shown by this study to be of high incidence in Kentucky.

From personal communication with many veterinarians in the state, they overwhelmingly indicated that over 80% of all puppies that are brought in for examination are infected with helminths. In the majority of cases, these puppies are from homes with children who have close contact with the pups.

According to Beaver,[8] since VLM was first reported, there have been over 150 reported cases and over 60 cases of accompanied endophthalmitis. The majority of cases were reported from the eastern part of the U.S. Furthermore, most of these cases were reported from children with a history of pica, hypereosinophilia, hyperglobulinemia, hepatomegaly, and poor health.

The etiology of VLM begins when soil containing embryonic *T. canis* eggs is ingested. The larvae hatch from the eggs in the small intestine, penetrate the intestinal wall, and migrate to/in internal organs. Within various organs, the conditions set-up are medically important, because they represent parasite-caused pathological conditions. They are interesting biologically, because they reflect the behavior of parasites in unnatural or abnormal hosts and the responses of such hosts to the parasites. Most of the larvae eventually come to rest in one location and become encapsulated by eosinophilic granulomatous reactions.

Diagnosis of VLM consists of demonstrating the larvae in the tissues (biopsy), taking into account the above clinical picture, and serological tests (intradermal, complement-fixation and haemagglutination) using antigen made from the adult *Toxocara*. As far as prevention of VLM, according to the veterinarians surveyed, all dogs, especially puppies, should be examined for helminths before placing them in homes where there are children. According to Scott,[9] treatment of VLM is unsatisfactory. Diethylcarbamazine given in high doses may be useful. Thiabendazole in the usual dose has also been tried successfully. In severely affected patients, particularly those with extensive pneumonitis, corticosteroids may be valuable to diminish the amount of inflammation.

Conclusion

To the author's knowledge, no cases of VLM have been reported from Kentucky; however, there have been a few hospital-documented cases in Fayette County (personal communication with resident pathologist). Nevertheless, this present study indicates that a potentially high reservoir of infection exists in the state for VLM from dogs infected primarily with *Toxocara canis* and secondarily, CLM from dogs infected with other helminths. Physicians, veterinarians, and public health officials need to be cognizant of these zoonotic diseases in Kentucky.

Acknowledgements

This project was supported by an Eastern Kentucky University research grant #45-02. The authors wish to thank all of the veterinarians in the state who helped to make this project a success and the Lexington Humane Society, for allowing us to enlarge our sample size.

(References on page 348)

TABLE 2

MOST PREVALENT HELMINTH PARASITES FROM KENTUCKY DOGS AS REPORTED BY 140 VETERINARIANS

Parasite	% Infected*			
	High	Above Average	Average	Below Average
Toxocara canis	56	16	14	3
Ancyclostoma caninum	46	13	13	0
Dipylidium caninum	43	20	20	3
Trichuris vulpis	33	23	23	1
Taenia pisiformis	23	0	30	11
Uncinaria stenocephala	14	3	13	14
Dirofilaria immitis	10	12	16	44
Spirocerca lupi	0	0	0	17

*Based on the % of total veterinarians reporting

EDITORIALS

Relicensure et Alii

THE assessment of physician competence in practice is a difficult problem as has been pointed out here and elsewhere. Amassing many hours or credits in continuing medical education exercises and passing re-certification examinations based on medical knowledge recall may indicate degrees and areas of clinical competence, but it is even more difficult to assess how such competence influences patient care. There is a wide gulf between the knowledgeable and skilled physician and the patient in need of care—a gulf that may be narrowed by conscientious motivation, compassionate attitudes, almost-constant availability and other factors difficult to measure and assess. To bridge the gulf, measure and assess, we have tissue committees, medical audits, institutional review committees, judicial councils, and grievance committees.

All of these are means to an end: better patient care; and our interest and personal involvement will and should be increasingly great. Specialty Board examination for recertification is an important part of these means and warrants close scrutiny now that the first such has been given. (The American Board of Internal Medicine, 26 October, 1974). The fact that most of us are now "certifiable" and that 21 other Boards have announced their intentions for similar examinations serve to emphasize our involvement and should stimulate our interest.

A recent special article by Meskaukas and Webster[1] tells of the examination, examiners, examinees, results and fascinating facts and figures together with an excellent commentary by Petersdorf[2], President of the American College of Physicians, co-sponsor of the examination with the ABIM. The examination was not a compulsory one—though consumer advocates may make it so in the future—and was offered to approximately 15,000 eligible internists. A question arises why only 4300 registered for the examination and only 3356 took it. There were 71 examinees over 65 years of age and the oldest was 77. It was not revealed who passed or failed in this age group but in a later paragraph two devastating revelations appear: first, "There was an inverse relation between age and examination performance" and second, "Persons who completed their graduate training most recently achieved higher scores than those who completed their training more remotely". The lesson here is clear but it poses additional questions!

The value of graduate training can be questioned further with the disclosure that examinees with less than and more than average graduate training performed less well than those with average or usual graduate training. What is the efficacy of our graduate training techniques? Since Kentucky is classified as a rural state by some, there is consolation, perhaps, in knowing physicians from rural areas were not at any disadvantage when compared to the urban physician-examinees. And for those who do or don't contemplate the healthy-wholesome association or dissociation of town and gown will be happy or sorry to learn that a university hospital environment or an academic post did not confer any particular advantage in the examination.

Good quality patient care can be assured by several interdependent means and a physician's competence to provide that type of care must be assessed by several interdependent means—relicensure alone will not do it, but relicensure and others will do it!

JSL

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[1]Meskaukas, John A., and Webster, George D.: The American Board of Internal Medicine Recertification Examination: process and results. *Am. Intern. Med.* 82:577-581, 1975

[2]Petersdorf, Robert G.: Recertification: a good beginning. *Ann. Intern. Med.* 82:583-584, 1975.

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

The Communication Vibes Are Zingy

I see that Doctor Lois DeBakey, professor of scientific communication at Baylor College of Medicine in Houston, is trying to teach physicians to speak and write English. Our profession is being metricated though somewhat slowly and reluctantly. SI, an abbreviation for Le Système International D'Unites—the universal language of measurements—comes before us more frequently. McGraw-Hill Publishers have a new *Dictionary of Scientific and Technical Terms* (only $39.50) containing almost 100,000 definitions of words from every branch of science and technology. We are learning to communicate better with one another in the same field as well as in other fields. Clearer communications and its advantages are treated cleverly and amusingly by Arthur I. Holleb, M.D., in *CA—A Cancer Journal for Clinicians* (25:112, March/April, 1975) entitled "Fruits, Vegetables and Cancer Dimensions" and is reprinted below. Do you have your centimeter ruler handy?

"Students learning the technique of a good physical examination are advised to be thorough and, of course, extremely accurate in evaluating significant findings. Perhaps because some habits are long in dying, descriptions of the dimensions of neoplastic tumors have been persistently dominated by edible fruits and vegetables.

"At a time when we are on the brink of conversion to a unifying metric system, one might expect tumors to be measured in centimeters rather than inches—and as precisely as possible.

"Unfortunately, this is not always the case. Too often one sees in charts examples like the the following:

'In the upper outer quadrant of the left breast is a mass the size of a grape.' (Or would you believe an olive?)

'Pelvic examination reveals a grapefruit-sized mass replacing the right ovary.'

'A pea-sized mass is palpable in the skin over the right clavicle.'

"More provincial or specialized descriptions of tumors include:

'The margins of the tumor are poorly defined but the overall size approaches a Mallard duck egg.'

'There is a small, movable mass, not fixed to the overlying skin, about the size of a black-eyed pea.'

'The large non-tender lump in the right gluteal region resembles a Florida orange.'

'The protruding cauliflower-like lesion is of medium size.'

"According to the United States Department of Agriculture, olives vary in size from 'subpetite' to 'supercolossal'; the dimensions of grapes, oranges and grapefruits depend on season, geographic origin and other factors; peas (presumably the black-eyed type as well) show considerable differences in the number required to make up one quart; eggs come in small, medium, large and extra-large, and from a wide variety of birds. Inexplicably, one physical examination report described a mass as the size of a *'hard boiled egg.'*

"The above suggests a deterioration in the art of tumor description. It seems appropriate, therefore, to register a plea for recording as accurately as possible the dimensions of tumors in centimeters. Attention to detail is important not only for maintaining high medical standards, but also for better clinical staging of cancer, evaluating prognosis when tumor size is pertinent, determining response to treatment and for adequate follow-up by others less experienced with agricultural products.

"Once and for all, let us eschew fruits and vegetables in reports of tumor size."

Letters to the Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

In 1963 and 1964 I was the consultant in Dermatology for *The Journal*. At that time Doctor William E. McDaniel of Lexington submitted a paper on the "Five Lesser Venereal Diseases."

He, at that time, included herpes progenitalis as a venereal disease. It was my feeling then that I hesitated to call herpes progenitalis a venereal disease. Therefore, I discussed this with Doctors Scheen, Mapother, Gillespie, Rutledge and some others. It was also their feeling that they would hesitate to classify this illness as a venereal disease, so Doctor McDaniel deleted this from his paper.

My purpose in writing this letter now is to rightly credit Doctor McDaniel with properly classifying herpes progenitalis as a lesser venereal disease in 1963 and 1964, because since then this disease is now commonly classified as such.

Doctor McDaniel was correct and this part of his paper we should have allowed to be published.

George R. McAuliffe, M.D.
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To The Editor:

It was estimated by the president of one of our three medical staffs here in Lexington that 150 hours a month had been donated for Utilization Review for this one hospital for purposes of Medicare, Medicaid, and third-party insurance carriers review.

Fortunate, indeed, are the medical staffs of the hospitals now that the new regulations for Utilization Review were issued in November, 1974. The Secretary of HEW gives the medical staffs three options, all legal, and, incidentally, all legal since 1966. The first option is to become a designated hospital and set up the medical staff PSRO. The second option is to have an outside group such as KPRO run it. The third option is to ask the hospital administration to employ a non-staff physician to carry out the certification, re-certification, and admission procedures.

The advantage of the third option is an incredible amount of time saved for busy medical staff members. For the hospital, for the first time, will be reimbursed for these services. For the physician, individually for option three, legal liability for malpractice suits are decreased, liability for the patient's bill is voided and a myriad of other liabilities are barred.

Option three has been elected since August, 1966, by two small hospitals, one in Mississippi and one in North Dakota, all legal and all acceptable by the carriers. The information should be shared with all members of the state medical association.

John B. Floyd, Jr., M.D.
119 E. Maxwell Street
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Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

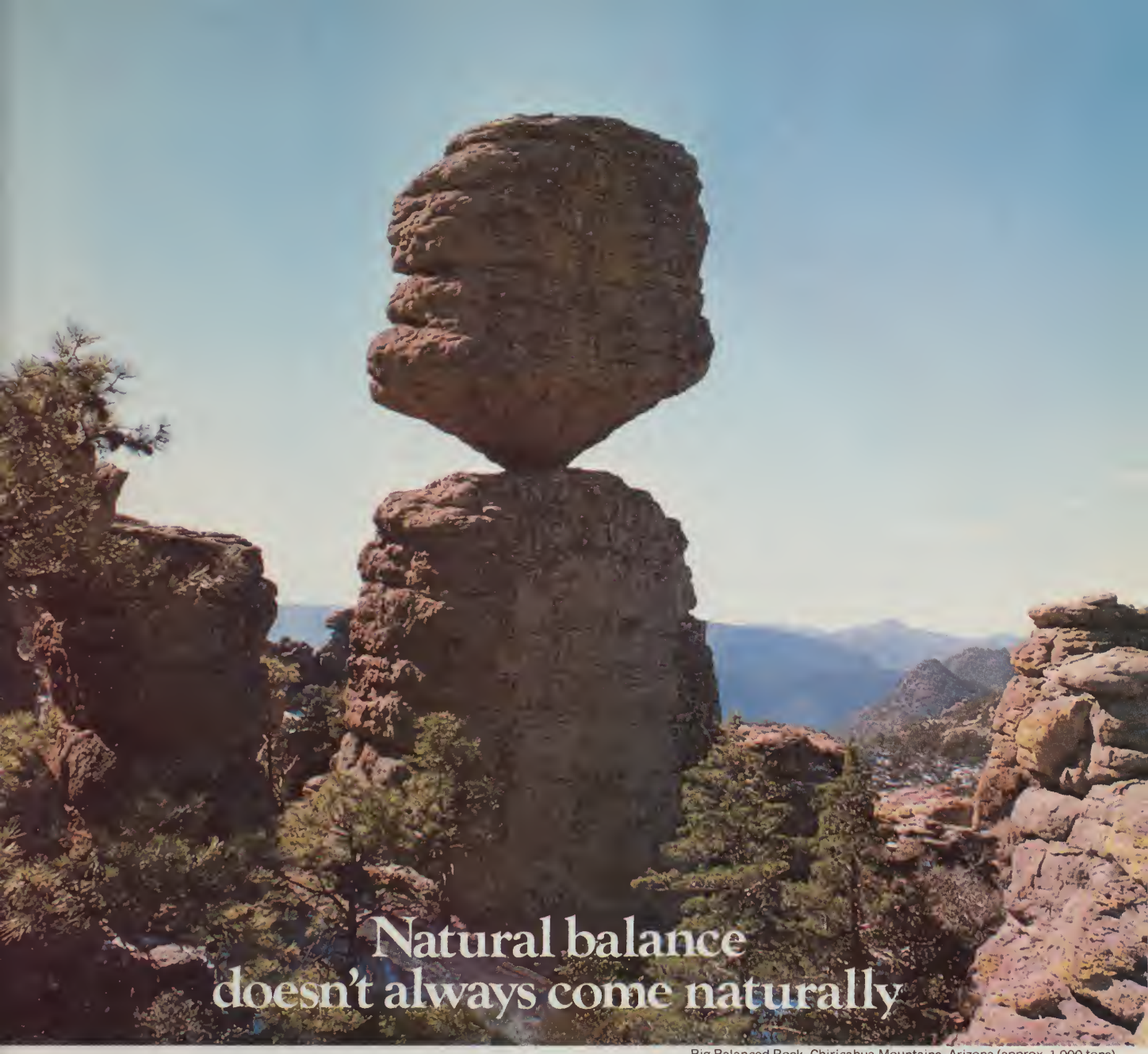
Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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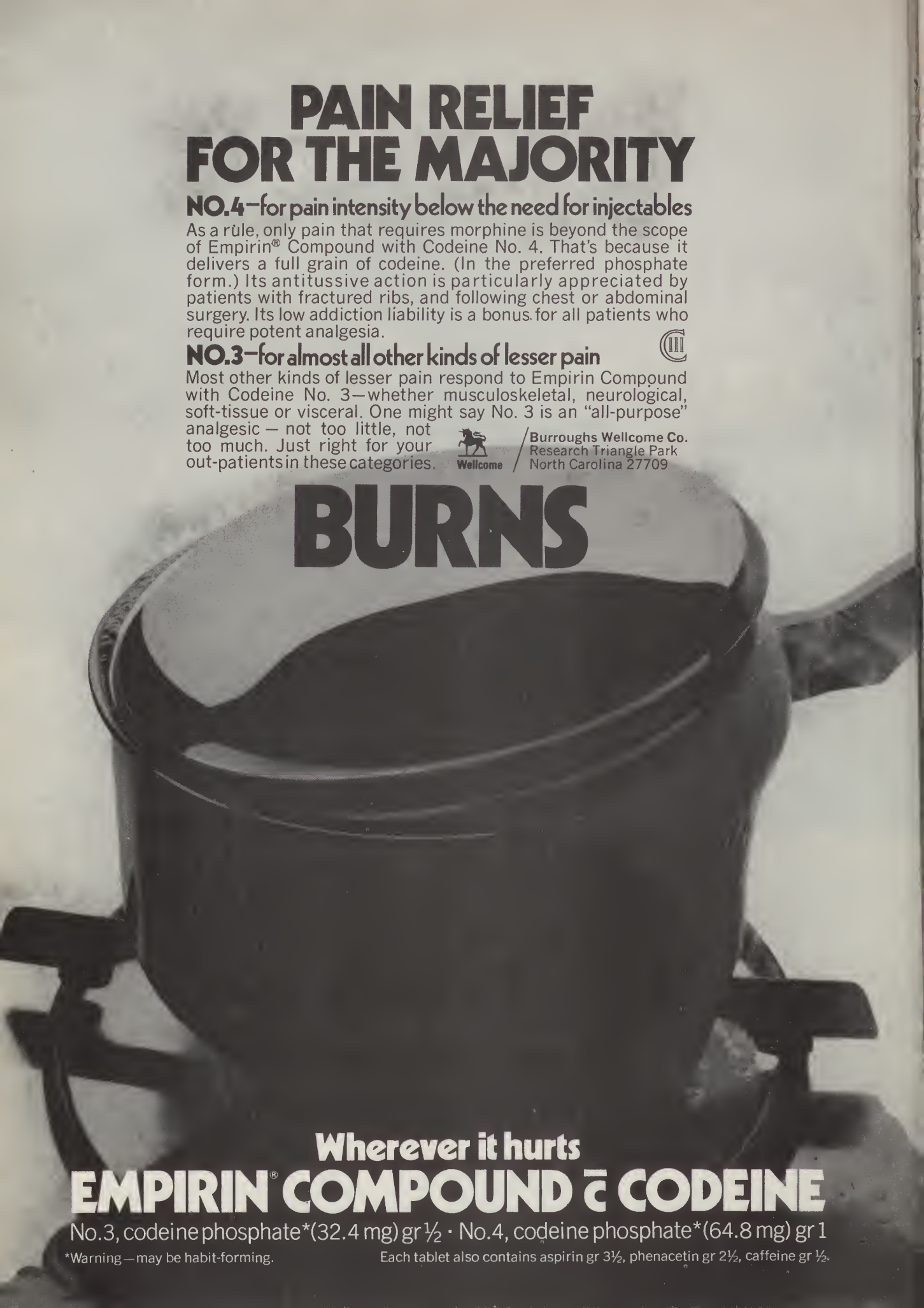
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SPECIAL ARTICLES

Medical Student Selection Relative to Physician Manpower In Kentucky

HAROLD B. BARTON, M.D.*

THE past two decades have seen profound changes in American Medicine caused mainly by the public's growing belief that health care is a right and not a privilege and the demand that government provide reasonable access to health care for all of its citizens.

This has led to the ever increasing involvement of the public sector in health care, from the "bricks and mortar" Hill-Burton approach of the 50's, the Medicare-Medicaid laws of the 60's to the HMO-PSRO legislation of the early 70's and finally the National Health Insurance legislation that is currently under discussion.

This has been accompanied by a public awareness of a critical shortage of doctors starting with the 1953 Presidential Report and going through the 1970 Carnegie Commission Report. There have been numerous blue-ribbon panels who have concluded that we need more doctors.[1]

Recognizing rather belatedly that the resources available to medical schools for expansion were, to say the least, strained in 1963, the Health Professions Education Assistance Act was passed, which for the first time provided for direct support for training doctors. This Act and the 1971 Health Manpower Training Act had as their primary objective the increased production of doctors. They have been very successful. In 1963, we had 87 medical schools graduating 32,000 doctors, and in 1974, we had 114 medical schools graduating 52,000 doctors. This had led to an increase in the physician/population ratio from 149 per 100,000 in 1959 to 173 per 100,000 in 1973.[2]

Health educators, planners and others have become increasingly aware that enlarging the supply has done little to relieve the critical shortages in under-served rural and inner city areas.

There is little agreement among authorities as to what proper ratios of the various specialties to population should be, but there is a broad consensus that there is a growing shortage of primary care physicians and that present programs are not sufficient to cure the problem.[3]

As new legislation is being considered, attention is now focused on the problems of maldistribution, both geographically and by specialty, and some rather radical solutions (Kennedy-Roy Bill) are being considered.

Our experience here in Kentucky has paralleled that on the national scene; we have doubled our production of doctors in the past decade, but we have continued to be plagued by shortages of Family Practitioners in rural areas. It is estimated, based on optimal physician/population ratios, that we need up to 1,000 primary care physicians here in Kentucky.

In spite of new Family Practice programs, we are continuing to see a net decline in family physicians (general practitioners) as older physicians retire.

The Sub-Task Force on Medicine of the Health Sciences Advisory Committee to the Council on Higher Public Education has been considering how the patterns of career selection and distribution of doctors might be altered to better meet the needs of Kentucky and the area. Under consideration, in addition to the

*Chairman of Committee on Student Selection of the Sub-Task Force on Medicine of the Health Services Advisory Committee to the Kentucky Council on Higher Public Education

curriculum and past doctoral training, was the study of student selection process.

Our two medical schools are presently graduating or have the potential to graduate sufficient students to meet the medical manpower needs of the Commonwealth, but the problem of career choice (i.e. too few primary care physicians), retention of graduates, and geographic distribution of these physicians are major problems. Other subcommittees are studying curriculum and post-doctoral training relative to these issues and this subcommittee has studied student selection. In general, our two medical schools have chosen from an enlarging pool of highly qualified applicants (in 1974, approximately 617 Kentuckians with a GPA of 3.18 and a M-CAT of greater than 500). In practice they have chosen what they consider the best possible raw material and have expected curriculum, post-doctoral training and professional opportunity to shape the end product to meet society's needs. Unfortunately, the finished product has contained too few primary care practitioners.

The committee has considered how the student selection process might be altered to help solve these problems.

Our present selection process gives great weight to those students with the highest GPA and M-CAT scores. There is considerable evidence that, in effect, this process has scientifically pre-selected students that are least likely to enter family practice. Dubé and Johnson have reported that those students with the highest GPA and M-CAT scores have expressed career choices in academics, research and specialty practice while those with the lowest GPA and M-CAT scores have indicated preference for general practice.[4] Concern has been expressed by Admission Committees that altering the present process could lead to a high attrition rate among our medical students. There are several studies which refute this premise. Bartlett in a 15-year study of students with exceptionally low GPA and M-CAT scores (below 425 and 3.0) at the University of Rochester could find no statistically significant difference in performance between those students and their colleagues.[5] Wingard and Williamson in a review of the literature which studied grades as a predictor of career performance, found no correlation between grades and performance.[6] We are not suggesting that GPA and M-CAT's be abandoned, but that base lines be established for the applicant pool which they consider numerically acceptable and the selection process then be based on other factors, i.e. psychometric testing, expressed career preference, interviews, biographical data and societal needs. Hopefully this process will have as its objective not only the selection of outstanding applicants, but the selection of outstanding applicants for a specific need of the Commonwealth.[7,8] Of course, it would be utterly futile to select students which would make ideal primary care physicians and not provide an educational setting in which they could fulfill their role (i.e. changes in curriculum and post-doctoral educational opportunity in their chosen field). There are growing pressures both from consumers of health services and legislative bodies to emphasize the health care needs of society and target admissions toward meeting these needs.

Geographic distribution of physicians in Kentucky was studied by the committee and the problems of the critical shortages in rural areas were considered. While there are many factors that influence site of practice which have been enumerated elsewhere, the primary concern of the committee was again how student selection might help alleviate this problem. A study of present students at our two medical schools show that approximately 65 per cent were from urban areas and 35 per cent from rural areas. Fifty per cent of the urban students were from Jefferson and Fayette counties. A study by E. Hassinger of the distribution of physicians in rural Missouri has clearly demonstrated that physicians in rural practice tend to arise from rural backgrounds. Of those physicians in Missouri, 90 per cent of those in practice in rural areas grew up in rural areas while 65 per cent of those in practice in metropolitan areas grew up in metropolitan areas.[9,10] Bond Bible in an AMA study has shown that this trend is national in scope.[11] If we hope to alter the pattern of geographic distribution of physicians by student selection, we must give added considerations to students from under-served rural areas as we are presently doing with minority groups.

Primary care physicians could be encouraged to settle in under-served areas through the use of financial incentives such as: aid to medical students, lump sum payments for capitalization

of offices, state and federal tax relief, and elimination of the inequities of the present Medicare-Medicaid fee schedule which discriminates against the rural practitioner.

The problems considered by the committee are not unique to Kentucky, but are nationwide in their scope and the resources of AAMC and the National Institutes of Health should be brought to bear on the subject. There is a clear danger that unless orderly modifications based on a reasoned analysis of the problems take place shortly, then these changes will be dictated by consumers and legislators.

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— Hospital Costs —

Average cost in Kentucky (BC-BS data)
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MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

CASE 13-72. This 34-year-old, married, white, Gravida VIII, Para V, Abortus II, had a previous spontaneous delivery at the same hospital in 1970 of a 10 lb 13½ oz infant. Blood pressure in labor was 140/70; on the first post-partum day it was 140/100. On her second post-partum day she was treated with magnesium sulfate and hydralazine hydrochloride 20 mg IM. Blood pressure was normal when she was discharged on her sixth post-partum day. She had a trace of glycosuria but did not have a glucose tolerance test. She had delivered stillborn twins at 7½ months at another hospital in 1963. During this pregnancy she was cared for by an obstetrician. She was due to deliver in October, 1972, and labor began spontaneously around 11:00 p.m. on November 4, 1972.

She was admitted to the hospital at 4:10 a.m. on November 5, 1972, having contractions every four minutes. She was Rh positive. Temperature was 98°. Pulse was 100. Respirations were 28. Blood pressure was 152/98. Vaginal examination revealed the cervix 3-4 cm dilated and thick. The presenting part was minus 2 station, ballotable, with the membranes thought to be intact. She received hydroxyzine pamoate 100 mg IM at 5:35 a.m. Membranes were thought to have ruptured spontaneously at 6:20 a.m. Fetal heart rate was good. Vaginal examination revealed the cervix 5 cm dilated with the presenting part at minus 2 station. When checked at 7:20 a.m. her blood pressure was 154/90. She received 75 mg meperidine hydrochloride IM at this time. At 10:15 a.m. blood pressure was 142/84. Fetal heart rate was good. At 12:20 p.m. she complained of pain in her chest with difficulty in breathing. Oxygen was started. The head was elevated, and portable chest x-ray was done. However, the patient was quite obese and it was not satisfactory. She was started on erythromycin 250 mg, two tablets at 12:40 p.m., and Benylin expectorant. No rales were heard in her chest. At 12:45 p.m. she was thought to be 6-7 cm dilated and at 1:45 p.m., 7-8 cm dilated. She received 50 mg of meperidine hydrochloride, half IV and half IM at 1:50 p.m. and 50 mg hydroxyzine pamoate IM. One thousand cc D5W were started at the same time. Her pulse was 92 at 12:40 p.m. Respirations were 24 and she felt better. At 2:30 p.m. her temperature, axillary, was 99.6°. She had some elevation in blood pressure at 3:30 p.m. of 150/100. Her pulse was 98. The forebag was felt at this time and it was ruptured artifically at 4:00 p.m. Her blood pressure was 170/110 and her pulse was 100. She received another 25 mg of meperidine hydrochloride IV and 25 mg IM at 5:05 p.m. and five units of oxytocin had been added to the previously running infusion. The oxytocin improved the quality of the contractions and she was catheterized, obtaining concentrated urine at 5:00 p.m. The cervix was felt completely dilated and the presenting part plus 1 station at 5:35 p.m. She had a saddle block at 5:40 p.m. and delivered with forceps, after manual rotation from LOP to LOA without episiotomy. There was severe shoulder dystocia but delivery was accomplished by fundal pressure and traction. The living male infant weighed 12 lbs 9½ oz and had a fairly good cry and good muscle tone. The placenta was partially manually removed and the uterus was explored.

The cervix was visualized, and a laceration was repaired on the left. There were no other lacerations and, as stated, no episiotomy was done. The infant's Apgar was 7 at one minute and 8 at five minutes. The blood loss was about 550 cc. Oxytocin was continued. Blood count on November 6 was 12.5 gm of hemoglobin and hematocrit 38%. Her white count was 12,500 with 93 segs and 5 lymphs, and 2 monos. The patient's bleeding was thought to be heavy and 10 units of oxytocin were added to the previous IV. Her blood pressure was 160/100. The uterus then remained firm and she continued to have a productive cough with light frothy sputum. The first post-partum day she complained of some dyspnea and was somehwat apprehensive. Blood sugar was 153; oxygen was given by nasal tubing. Her blood pressure was 140/180. Oxygen was given at 5 liters. Her blood pressure remained elevated at 160/100. She had 650 cc of urine by catheter.

The second post-partum day she was still receiving oxygen. It was discontinued. However, the patient still seemed very apprehensive and nervous, complaining of thirst and a restless night. Her temperature was 101° at 3:20 a.m.; pulse was 110; and respirations were 20. At 8:30 a.m. temperature was 99.4°, pulse 130, and respirations 24. She complained of headache and chills. Her blood pressure was normal. Aspirin was given for temperature elevation. She was up in a chair with help. Temperature spiked to 104° on November 8. She was given ampicillin

trihydrate 500 mg three times a day. She stated she felt fine. Her pulse was elevated to 130. Mid-stream urinalysis was obtained for culture and sensitivity and it revealed a number of white cells and red cells, 2 plus protein and some blood, and 2 plus bacteria. On colony count there was 100,000 *Klebsiella pneumoniae* entercocci. On November 9 she was still getting aspirin for the temperature elevation and her blood pressure was normal at 130/80. Temperature was 102° at 2 a.m. on the 9th but she was up and showered without problems. A glucose tolerance test was performed on the 11th and her fasting level was 87 negative sugar; on one half hour, 154 negative urine; one hour 206, negative urine; two hours 161 with a trace of sugar in the urine; three hours 69, negative urine; and four hours 79 with a negative urine. A repeat chest x-ray on the 6th showed no infiltrate. The heart was slightly magnified from the projection but it appeared normal. The portable chest x-ray obtained prior to her delivery showed the lower lobes to be obscured by the overlaying breast tissue and the right costophrenic angle was not included on that examination; the study was repeated and reported as a normal portable chest. She had no complaints. On the 10th, the fifth post-partum day, the blood pressure was 130/84. Her pulse was about 70 on discharge and her temperature was 99.2° when discharged on November 11, 1972.

Her husband worked at night. Her physician said he was awakened in the morning by a phone call saying that the patient was struggling for her breath. Mouth-to-mouth resuscitation was given and emergency assistance was obtained. She was DOA on arrival at the hospital.

An autopsy was performed. She had a massive embolism of the pulmonary artery that originated from the right ovarian vein area. Additional findings were severe bilateral chronic pyelonephritis, hepatosplenomegaly.

Comments

The Committee classified this as a direct obstetrical death with possible preventable factors. It is felt that this patient most likely had pelvic phlebitis as well as right ovarian vein phlebitis. This resulted in the embolism. Possibly by more intensive treatment of her febrile illness, this death could have been prevented. However, such cases of fatal pulmonary embolism occur under the most intensive treatment. The incidence of fatal pulmonary embolus in pregnancy is said to be approximately 1 in 10,000 deliveries.

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ORGANIZATION SECTION

"Cancer—Detection and Therapy" Is One Theme Of 1975 Annual Meeting Scientific Sessions

The 1975 KMA Annual Meeting, in its second General Scientific Session on Wednesday morning, September 24, will spotlight a major health problem in which new research is intensive and hopeful—"Cancer—Detection and Therapy."

A number of nationally-respected physicians will assemble to present this critical topic to Kentucky physicians and health professionals, 3000 of whom are expected to attend the convention scheduled for September 23-25 at the Ramada Inn/Bluegrass Convention Center in Louisville.

Plans are nearly finalized for the week's activities, to include four scientific sessions, two House of Delegates meetings, the President's Luncheon, the KEMPAC Seminar and Banquet, and the Annual Convention of the Woman's Auxiliary to KMA. University of Louisville alumni reunions will be held for several medical school classes, and an array of scientific and technical exhibits will be displayed for educational and informational purposes.

Meetings of 18 specialty groups are also to be held on Tuesday afternoon, September 23, and Thursday afternoon, September 25, in conjunction with the Annual Meeting. Meeting rooms will be located in the Bluegrass Convention Center, with the exception of the Kentucky Dermatological Society which will meet at Louisville General Hospital.

The four themes of the planned 1975 General Sessions Program are "Sexual Performance", "Cancer—Detection and Therapy", "Sports Medicine", and "Gut—Issues and Answers".

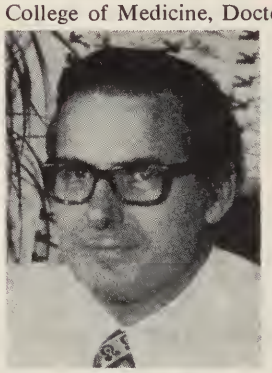
Among the professionals to discuss cancer detection and therapy are Tom R. Demeester, M.D., Chicago, Illinois, speaking on "A Case for Early Diagnosis of Lung Cancer", and Alvin M. Mauer, M.D., Memphis, Tennessee, on "Acute Leukemia of Children, Current Progress and Future Needs".

Doctor Demeester is an assistant professor of the Department of Surgery, and Chief of the Section of Thoracic and Vascular Surgery, at the University of Chicago School of Medicine. He received his M.D. degree in 1963 from the University of Michigan School of Medicine, and is a Fellow of the American College of Surgeons and the American College of Chest Physicians. Doctor Demeester has had several articles and abstracts published in his field.



Doctor Demeester

A 1953 graduate of the State University of Iowa College of Medicine, Doctor Mauer has been Medical Director of St. Jude's Children's Research Hospital and Professor of Pediatrics at the University of Tennessee in Memphis since 1973. Prior to this, he was Director of the Division of Hematology at the Children's Research Foundation, Cincinnati, and Director of the Division of Hematology and the Hematology Clinic at Children's Hospital in Cincinnati, as well as having been a Fellow at the Children's Hospital Research Foundation in that city and Professor of Pediatrics at the University of Cincinnati. Doctor Mauer is a member of the American Association for Cancer Education, the International Society of Hematology and the American Association for Cancer Research, and is the author of many articles on pediatrics and cancer research.



Doctor Mauer

More information on the program and activtiies of the 1975 KMA Annual Meeting will be carried in upcoming issues of the *Journal* and the *Communicator*. The August *Journal* will again feature the special Annual Meeting Section, with complete details on the scientific sessions, the House of Delegates and reference committees, the exhibits, and registration information.

1975

KMA ANNUAL MEETING

Preliminary Program

Featured in July Journal

July 15 Is The Deadline For KMA Awards Nominations

All nominations for KMA's two top awards, traditionally presented at the Annual Meeting in September, must arrive at KMA by July 15, according to Richard F. Grise, M.D., Bowling Green, Chairman of the Awards Committee.

The Distinguished Service Award is presented to a physician in Kentucky for contributions to organized medicine in the form of membership and activity in a county medical society and the State Association. The award can also be based upon individual medical service; community health, education and civic betterment; medical research; and distinguished voluntary military service. Last year's award was given to J. Farra Van Meter, M.D., Lexington.

The Kentucky Medical Association Award honors a lay person for outstanding accomplishments in the field of health and/or medical care. Hasty W. Riddle, Louisville, Executive Vice President of the Kentucky Hospital Association, received the 1974 award.

All nominations should be sent to the KMA Headquarters Office marked "Attention: Awards Committee." Presentation of the awards will take place during the President's Luncheon on September 24, at the 1975 KMA Annual Meeting.

4th and 7th Trustee Districts Met in March, April

The 4th KMA Trustee District met on March 27 in Bardstown, while the 7th District met in Frankfort on April 16, to begin the annual meetings of the Trustee Districts for the 1974-75 Associational year.

Medical liability insurance was the topic presented to the 4th Trustee District by Riley Lassiter, General Agent for the Medical Protective Company. Hoyt D. Gardner, M.D., Louisville, KMA President, discussed current activities of the American Medical Association. Doctor Gardner serves as a member of the AMA Board of Trustees. Charles B. Spalding, M.D., Bardstown, is Trustee of the District.

The 7th District heard Doctor Gardner discuss various issues of importance to the medical profession. The District's Woman's Auxiliary to KMA met also during the same evening. The 7th District Trustee is John P. Stewart, M.D., Frankfort.

Several Trustee Districts Meet in May, June

The 6th, 10th, and 13th KMA Trustee Districts each met on Tuesday, May 13, the 2nd Trustee District met on Tuesday, May 27, and the 15th District assembled on Wednesday, June 4, continuing the round of annual trustee meetings for the Associational year 1974-75.

The 6th District, meeting in Bowling Green, heard Tom Nesbitt, M.D., Nashville, Speaker of the AMA House of Delegates, speak on the topic, "What Is AMA Doing?" Paul J. Parks, M.D., Bowling Green, is Trustee of the District.

"Current KMA Activities" was the topic for the 10th District meeting in Lexington. The Trustee of the District is James B. Holloway, M.D., Lexington.

Arthur H. Keeney, M.D., Louisville, Dean of the University of Louisville School of Medicine, discussed recent progress at the University with the 13th Trustee District in Ashland. J. Wesley Johnson, M.D., Ashland, is the Trustee of the District.

At the 2nd District meeting in Owensboro, Frank J. Jirka, Jr., M.D., Berwyn, Illinois, a member of the AMA Board of Trustees, participated in the program, as well as Paul J. Parks, M.D., Bowling Green, who answered questions on Associational activities for the coming months. Trustee of the District is Charles C. Kissinger, M.D., Henderson.

Members of the 15th Trustee District, meeting in Barbourville, heard a presentation by Mr. Herbert Emrich, Administrator of the Daniel Boone Clinic. David A. Hull, M.D., Lexington, KMA President-Elect, spoke on current activities of the KMA. Harold L. Bushey, M.D., Barbourville, is Trustee of the District.

K. Jane Younger, R.N., was named Nurse of the Year by the Kentucky League for Nursing at their annual meeting held in Louisville April 22-23. Miss Younger is Associate Director for Clinical Nursing at Jewish Hospital, Louisville, and also directs the Stoma Clinic there.

In Memoriam

VIRGIL CLAY GILLESPIE, M.D.
Wilmore
1888-1975

Virgil Clay Gillespie, M.D., died on February 22 at the age of 86. A general practitioner, Doctor Gillespie graduated from the Medical Department of the University of Louisville in 1910. He was an emeritus member of the Kentucky Medical Association and a member of Jessamine County Medical Society.

SAMUEL G. BELL, M.D.
Murray
1935-1975

Samuel G. Bell, M.D., died in April of this year. Doctor Bell practiced internal medicine, and was a 1958 graduate of the University of Tennessee. He was a member of the Kentucky Medical Association, the Calloway County Medical Society, and the American Medical Association.

Digest of Proceedings, Board of Trustees

April 9-10, 1975

The KMA Board of Trustees met on April 9-10, 1975, at the Headquarters Office in Louisville. The President's Report and Headquarters Office Report were reviewed and accepted for information at the start of the meeting.

Reports on utilization review regulations, health maintenance organization regulations, and liability insurance were also reviewed and accepted for information.

The budget for fiscal year 1975-76 was approved as recommended by the Executive Committee, with the exception that funds were included for KMA participation in Health Careers in Kentucky.

The Board unanimously approved the "Five-Year Dues Plan" as recommended by the Budget Committee and recommended its approval to the House of Delegates. (The dues plan will be published in the July *Journal.*)

W. Neville Caudill, M.D., Louisville, reported on the activities of the Kentucky Peer Review Organization and noted that primary emphasis at this time was on submission of a grant application for conditional designation as a statewide PSRO.

A lengthy discussion was held concerning a petition for a special-called meeting of the House of Delegates. Based on the results of a survey taken of all delegates, the Board supported the suggestion of KMA President Hoyt D. Gardner, M.D., not to call a special meeting of the House but rather to hold a Task Force Hearing on Professional Liability Insurance for all members. (This meeting was set for June 5 at the Breckinridge Inn in Louisville.)

William P. McElwain, M.D., Commissioner for Health Services, and Mr. C. Leslie Dawson, Secretary of the Department for Human Resources, discussed various facets and problems of the Title XIX Program.

The Board nominated a number of physicians to serve on several state councils and boards and forwarded them to the Governor for appointment.

Committee action and recommendations to the Board were as follows: 1) *Health Manpower and Placement Services Committee* recommended that support be given to increase the number of first year primary care residency positions. 2) *Business Management and Services Committee* reported on negotiations with Blue Cross and Blue Shield on group contract options and on group travel plans for the AMA Clinical Meeting in Hawaii. 3) *State Legislative Activities Committee* reported on meetings attended by the Chairman which concerned legislative proposals for the next General Assembly. Discussion was held on changes proposed by the Kentucky Nurses Association in the Nurse Practice Act and the Board requested the Legislative Committee to oppose these changes which would allow registered nurses, in effect, to make diagnoses and prescribe therapy. 4) *National Legislative Activities Committee* recommended and received endorsement of the AMA National Health Insurance bill which will soon go before Congress. 5) *Public Relations Committee* reported on the Office Assistants Seminars held this year and the "New Physician's Workshop" set for April 22 and 23. 6) *Emergency Health Care Committee* announced the Fifth Annual Emergency Health Care Seminar was set for June 4 and 5 at the Executive West Hotel in Louisville. 7) *Medical Education Committee* recommended continuing education requirements by specialty to the Board of Medical Licensure for mandatory CME. 8) *Committee on Environmental Quality* recommended that it be allowed to serve in an advisory capacity to the Department of Natural Resources and Environmental Protection.

The date of the next meeting of the KMA Board of Trustees was set for August 7 at the KMA Headquarters Office.

Helminth Parasites of Dogs From Kentucky

(Continued from Page 332)

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Ky. M.D.s Appointed Delegates To World Health Assembly

Hoyt D. Gardner, M.D., President of the Kentucky Medical Association, and Tim Lee Carter, M.D., Kentucky Representative from the Fifth Congressional District, were appointed by President Gerald R. Ford to represent the United States as delegates to the World Health Assembly in Geneva, Switzerland.

Comprised of member nations of the United Nations, the Assembly convened May 13 through May 30, 1975 and was charged with the task of reviewing the health problems of the entire world and providing solutions to these very pressing problems.

Doctor Gardner's wife, Rose, a former President of the Woman's Auxiliary to KMA, accompanied him on this trip.

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PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp.=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

One prescription can economically treat the entire family.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

NSN 6505-00-148-6967

Pinworms, roundworms controlled with a single, non-staining dose of

ANTIMINTH®
(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

*Data on file at Roerig

Please see prescribing information on facing page.

Help stop the tears

of colic, diarrhea or similar malady.



Use i-Soyalac.

i-Soyalac and regular Soyalac are palatable, readily digestible and assimilated. It simulates human milk in appearance, taste and texture. It is complete with vitamins and minerals. It is suitable for infants and children who are sensitive to or cannot tolerate cow's milk.

For nearly a quarter of a century, Soyalac has proven its value in promoting growth and development—as shown by extensive clinical data.

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Or a simple note on your prescription form will do.

In patients with chronic or frequently recurrent urinary tract infections

Bactrim™ outperforms ampicillin.

In new multicenter studies a higher percentage of Bactrim-treated patients maintained clear cultures for four, six and eight weeks.

See charts on following page for details of studies.



For chronic cystitis or pyelonephritis evidenced by persistent bacteriuria, frequently recurrent infections or infections associated with urinary tract complications, when infection is due to susceptible organisms.

Bactrim™

(80 mg trimethoprim/400 mg sulfamethoxazole)



Before prescribing, please consult complete product information, a summary of which follows:

INDICATIONS: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii*.

Note: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections.
The recommended quantitative disc susceptibility method (*Federal Register* 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy, "Intermediate susceptibility" also indicates a likely response and "Resistant" that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. Data are insufficient to recommend use in infants and children under 12.

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

DOSAGE: Not recommended for children under 12.
Usual adult dosage: 2 tablets b.i.d. for 10 to 14 days.
For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	2 tablets every 24 hours
Below 15	Use not recommended

Supplied: Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

ROCHE

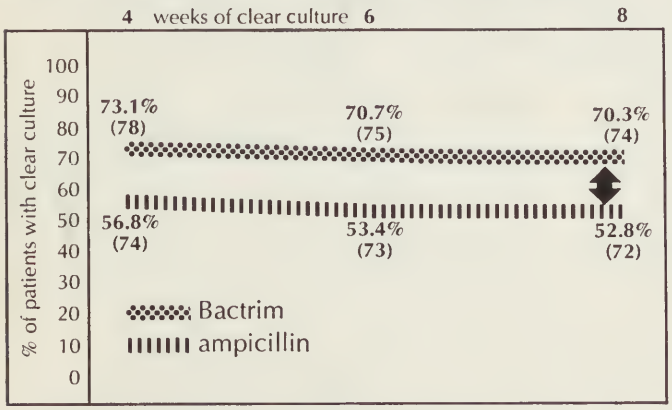
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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

In new multicenter studies of patients with chronic or frequently recurrent urinary tract infections

Bactrim™
(80 mg trimethoprim/400 mg sulfamethoxazole)

outperforms ampicillin

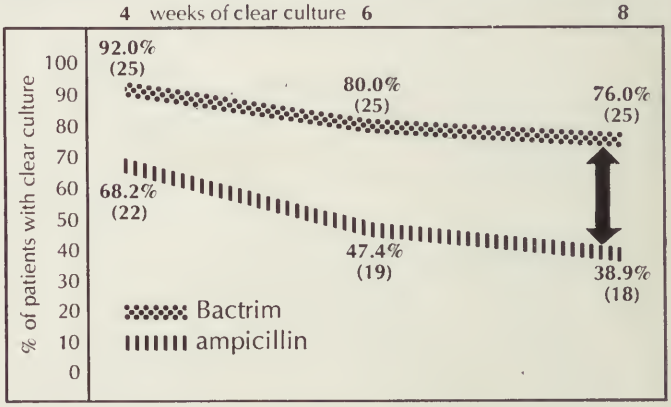
Bactrim vs ampicillin. 10-day therapy. 157 patients.



Criterion for clear culture: 1000 or fewer organisms/ml of urine.
Numbers in parentheses: No. of patients evaluated for this time period.

17.5% The Bactrim plus.
Patients maintaining clear cultures for 8 weeks
Bactrim: 70.3%
ampicillin: 52.8%

Bactrim vs ampicillin. 28-day therapy.* 53 patients.



Criterion for clear culture: 1000 or fewer organisms/ml of urine.
Numbers in parentheses: No. of patients evaluated for this time period.

37.1% The Bactrim plus.
Patients maintaining clear cultures for 8 weeks
Bactrim: 76.0%
ampicillin: 38.9%

In two multiclinic, double-blind studies of patients with chronic or frequently recurrent urinary tract infections, Bactrim maintained a higher rate of clear cultures than ampicillin. All patients had "significant bacteriuria" (100,000 or more organisms/ml of urine) on two consecutive pretreatment cultures; many had previously undergone multiple treatment programs and/or surgery. Organisms were *E. coli* and *Proteus mirabilis*.

Side effects were relatively mild (e.g., nausea, vomiting, rash), but more serious side effects can occur with the agents studied. Please consult the manufacturers' product information for all warnings, precautions, contraindications and adverse reactions.

*While the usual therapy regimen for Bactrim is 10 to 14 days, patients with chronic urinary tract infections can be and are treated for substantially longer periods with standard agents such as ampicillin. These studies, therefore, include both 10-day and 28-day courses of therapy. In both studies dosage was one 500-mg ampicillin capsule q.i.d. or two Bactrim tablets b.i.d. plus placebos to make each drug regimen appear identical.

ROCHE

Please see preceding page for summary of product information.

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The Journal of The
KENTUCKY
Medical Association

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VOL 73
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VOLUME 73 JULY 1975 NUMBER 7

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

SEP 12 1975
AUG 29 1975

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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The MUDRANES

Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23261

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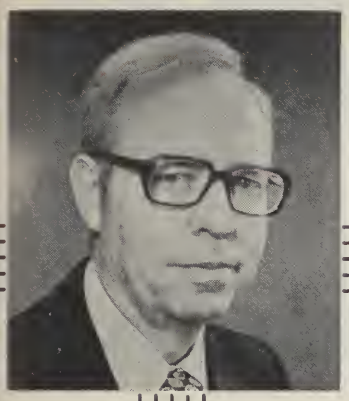
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MESSAGE FROM THE PRESIDENT



Single and Together

Organizations must surely be the work of a devil. To most everyone's knowledge collectivism makes uncomfortable demands.

With repetitious cadence, sacrifices of time are the marching orders of the day. With predictable succession, there is continual interface with both friend and foe. Organization costs money.

Why then do organizations exist if they make such demands? Can we do as well or better without them?

Shall we become adventuresome. Let's abolish united energies and view the world around without the continual forced demands of a mass amalgamation.

What of time? Can we as singles pursue common purpose with the same economy of time and yet have the same fulfillment of objectives?

What of effort? Will the individual bring continuous sustained resounding force with the crescendo of climax necessary to enforce an action or conclusion which succors each of us and will be meaningful in concert? Will we accept an end result of a one-unit effort the same as we will if it's an expression of collective group harmony?

What of money? Can many individuals, each and separately, afford expenditures in any way that will be as meaningful or as substantial in amount as a group? Will money spent in cause and crusade in one's image have dimensions and satisfy the common demands of the sum total of people of similar purpose?

Bless us. We each want, seek and strongly insist on personal identity but our cries are muffled by throngs.

So—alas. In the quiet sanctuaries of private meditation we find that which we seek. Personal representation and expression is possible today in the turmoil and the tumult, but not from anyone alone. It will come from the multitude, but it can only be found in collective concensus.

At the end it may be surmised that our organization complexities are as the Bible teaches us. It says to love our enemies as we do our friends for they are often the same people.

Perhaps that's too pontifical. Try this another way. Pat was brought up before a magistrate for disorderly drunkenness. When asked to explain, he excused his behavior because of bad companions. The magistrate asked who his friends were and Pat said, "Four teetotalers." The magistrate remonstrated that teetotalers should be the best companions that he could have. "Oh no they're not," said Pat. "I had a whole bottle of whiskey with me and I had to drink it all myself."

It's hoped you like this anecdote. It's a single story. It makes a collective point. It's one of the many ties that bind.

Hoyt Gardner

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

JULY

17-18 KAFP Lake Barkley Seminar, Cadiz

SEPTEMBER

22 1975 John I. Perlstein Memorial Lecture, "Treatment of Acute Lymphocytic Leukemia in Children," UL Health Sciences Center, Louisville

23-25 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

26-28 "Scientific Foundations for Clinical Practice,"* Fee: $45, UK Medical Center, Lexington

OCTOBER

27-31 Gerontological Society, Galt House, Louisville

IN SURROUNDING STATES

JULY

21-26 Current Concepts in Radiology, Atlantis Lodge, Atlantic Beach, North Carolina

23-Aug. 1 "Human Sexuality", Institute for Sex Research, Indiana University, Bloomington. Fee: $285

AUGUST

18-21 American Hospital Association, Chicago

SEPTEMBER

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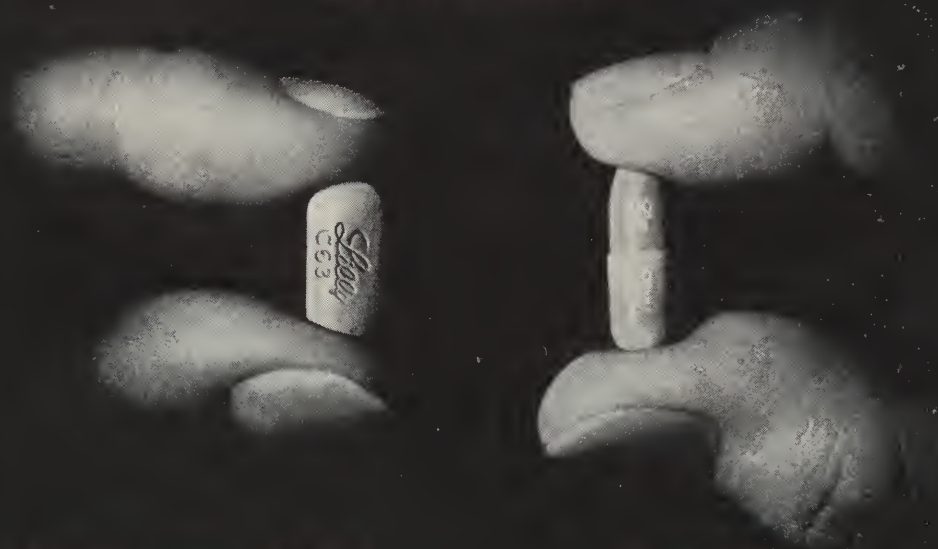
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Treatment of Lobar Pulmonary Metastasis In Childhood Cancer

GEORGE BARROWS, M.D.* AND DONALD R. KMETZ, M.D.*
Louisville, Kentucky

The treatment of children with pulmonary metastasis involving a single lobe is discussed. The combination of surgery, radiation therapy and chemotherapy provides a favorable prognosis.

CANCER is the second most common cause of death in children over one year of age. Tumors outside the central nervous system comprise approximately 40 per cent of all childhood malignant solid tumors.[1] During the past 15 years, the introduction of effective chemotherapeutic agents and advancement of surgical and radiation techniques has improved the survival times and cure rates in several types of childhood malignancy.[2,3] Equally important in this improvement has been the coordination among surgeons, radiation therapists and chemotherapists.[2]

With improved control of primary solid tumors a corollary improvement in metastatic lesions might be anticipated. Lung metastasis after satisfactory treatment of a primary cancer has long been considered an ominous prognostic sign. Yet early treatment of these metastatic lesions yields a surprisingly high survival rate in many series.[4-6] With aggressive management some authors report survival rates in patients with pulmonary metastatic lesions that compare favorably with the survival rates of the original tumor.[7]

Of the solid tumors of childhood, Wilms's tumor, undifferentiated soft tissue sarcoma, rhabdomyosarcoma, osteogenic sarcoma and Ewing's sarcoma commonly metastasize to the lungs. Sixty-six patients seen at Louisville Children's Hospital between 1962 and 1972 had a tissue diagnosis of cancer of this type (Table 1). Seven patients with controlled primary tumor who did not have metastatic disease at the time of diagnosis later developed pulmonary metastasis confined to a single lobe. These seven cases are reported in this study. Five of these patients had Wilms's tumor, one had osteogenic sarcoma and one had undifferentiated soft tissue sarcoma. The treatment and survival times of these patients is summarized in Table 2. Six of seven patients are living and free of disease one to six years after diagnosis.

Case Reports

Case 1, *N. H.*: This 11-year-old black male had a below the knee amputation for undifferentiated soft tissue sarcoma. Three pulmonary metastatic lesions in the right lower lobe were noted on follow-up chest x-ray six months later. These were treated with radiation, Actinomycin D and Vincristine. The lesions regressed but recurred nine months later and were surgically excised. The patient received postoperative Actinomycin D, Vincristine and bilateral pulmonary irradiation. It is now six years since pulmonary metastasis and the pa-

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tient has been without treatment for three and one-half years. The patient is completely free of disease at this time.

Case 2, *M. B.*: This two-year-old white male had a nephrectomy for Wilms's tumor, Stage II and received postoperative abdominal irradiation and Actinomycin D. Eighteen months after diagnosis the patient was noted to have a left upper lobe solitary metastatic lesion. The patient was first treated with Vincristine with no response. One month later the lesion was surgically removed. The patient received a postoperative course of bilateral pulmonary irradiation and combination Actinomycin D and Vincristine therapy. It is now five and one-half years since diagnosis of the original lesion and four years since resection of the pulmonary metastasis. The patient is completely free of disease at this time and received the last course of chemotherapy three years ago.

Case 3, *J. S.*: This 18-year-old black male had a below the knee amputation for osteogenic sarcoma. The patient had postoperative Cytoxan for seven months. Sixteen months postoperatively a left lower lobe metastasis was noted on a routine chest x-ray. The patient was given bilateral irradiation, Vincristine and Actinomycin D therapy. The lesion regressed but returned and the patient had a left lower lobectomy two months later. Postoperatively, the patient was given Actinomycin D, Vincristine and Cytoxan therapy. Currently, the patient is completely free of disease five years after diagnosis and three years after pulmonary metastasis. It is two years since the patient's last course of chemotherapy.

Case 4, *J. C.*: This six-year-old black male had a left nephrectomy for Wilms's tumor, Stage II, followed by irradiation to the tumor bed and Actinomycin D therapy. The patient developed a solitary right upper lobe metastasis 14 months after diagnosis. A lobectomy was performed one week later. Postoperatively, the patient was given bilateral irradiation and Vincristine therapy. The patient is living free of disease four and one-half years after diagnosis and three and one-half years after the occurrence of his metastatic pulmonary lesion.

Case 5, *T. H.*: This 14-year-old white male had a nephrectomy for Wilms's tumor, Stage II, followed by a course of Actinomycin D and tumor bed irradiation. Twenty-seven months later a left upper lobe metastasis was noted and the patient underwent left upper lobectomy. The patient had bilateral irradiation and Vincristine therapy postoperatively. The patient is living free of disease four years after diagnosis and two years after development of pulmonary metastasis.

Case 6, *T. L.*: This two-year-old white male had a left nephrectomy for Wilms's tumor Stage III and received a postoperative course of irradiation to the tumor bed and Vincristine. Five months later a right middle lobe metastatic lesion was noted which cleared following bilateral irradiation and Actinomycin D therapy. The lesion recurred six months later and was surgically resected. Two months later, a right pulmonary metastasis was again noted which extended into the mediastinum. The patient was given irradiation but died four months later.

Case 7, *L. M.*: This three-year-old white female had a nephrectomy for Wilms's tumor, Stage I and received postoperative courses of Actinomycin D and Vincristine. The patient developed a left upper lobe metastasis four and one-half months later and had left upper lobectomy two days later. The patient received a postoperative course of bilateral irradiation to her lung fields and Vincristine. The patient is alive and free of disease two and one-half years since diagnosis and two years after pulmonary metastasis.

Table 1

Type of Tumor	Total No. of Patients 1962-1972
Wilms's Tumor	34
Rhabdomyosarcoma	14
Osteogenic Sarcoma	7
Ewing's Sarcoma	6
Soft Tissue Sarcoma	5
Total	66

Discussion

In children, the incidence of pulmonary metastasis from solid tumors outside the central nervous system is high.[9] In patients who have well controlled primary cancer, pulmonary metastasis is most effectively controlled by combined therapy.[3] Even where multiple pulmonary metastases are present, aggressive management of these lesions with combined surgery, irradiation and chemotherapy meets with favorable results.[5,6,8]

The cases reported here are a select group and include only those with completely controlled primary tumors who later develop pulmonary metastasis confined to one lobe. Patients having poorly controlled primaries, pulmonary metastases at the time of diagnosis or extensive pulmonary lesions will have a much poorer prognosis. The purpose of this report is to emphasize that favorable response can be achieved when combination therapy is utilized in the treatment of pulmonary metastasis to a single lobe.

A high degree of cooperation among the radiation therapist, chemotherapist and surgeon is needed in order to salvage these patients. With combination therapy, the period of risk in developing a metastatic lesion appears to be lengthened and, therefore, careful follow-up is essential. In the cases presented here, four of seven patients had appearance of their first pulmonary lesion over one year after their primary tumor and in two of the cases, metastatic lesions developed 27 months after treatment. Since the period of risk is long and effective treatment depends on early detection of metastatic foci, we obtain chest x-rays at six-week intervals for the first two years and at no less than three-month intervals for the next year.

While chemotherapy may affect initial regression of pulmonary lesions, recurrence of these lesions is not uncommon. For this reason, we now feel that immediate surgical resection of a lobar pulmonary metastatic lesion is indicated when the primary tumor has been well controlled. In the patients presented here, all three who received nonsurgical therapy had recurrence of metastasis after initial regression of the metastatic lesion. Included in this group is the only patient (case 6) not surviving his pulmonary metastasis.

We believe that bilateral irradiation is indicated even when demonstrable metastatic disease is unilateral. The random placement of

Table 2

Isolated Pulmonary Metastasis with Controlled Primary Tumor

PT.	AGE/DX (YR.)	DIAGNOSIS	DATE/DX	TREATMENT PRIMARY	DX OF MET (MOS.)	TREATMENT PULMONARY	SURVIVAL FROM DX (YR.)	SURVIVAL FROM PUL MET (YR.)	SURVIVAL TIME SINCE Rx (YR.)
N.H.	10½	Sarcoma of leg	5/67	Surgery (Amputation)	6	Radiation, Act. D., Vinc.			
					15	Surgery, Radiation, Act. D., Vinc.	7½	6	3½
M.B.	2	Wilms's (II)	1/69	Surgery, Radiation, Act. D.	18	Surgery, Radiation, Act. D., Vinc.	5½	4	3
J.S.	18	Osteogenic sarcoma of leg	11/69	Surgery (Amputation), Cytoxan	16	Radiation, Vinc., Act. D.			
					19	Surgery, Act. D., Vinc. Cytoxan	5	3	2
J.C.	6	Wilms's (II)	2/70	Surgery, Radiation, Act. D.	14	Surgery, Radiation, Vinc.	4½	3½	2
T.H.	14	Wilms's (II)	6/70	Surgery, Radiation, Act. D.	27	Surgery, Radiation, Vinc.	4	2	½
T.L.	2	Wilms's (III)	12/70	Surgery, Radiation, Vinc.	5	Radiation, Act. D.			
					11	Surgery, Act. D.			
					13	Radiation	1½	Expired	
L.M.	3	Wilms's (I)	5/72	Surgery, Act. D., Vinc.	5	Surgery, Radiation, Vinc.	2½	2	½

metastatic pulmonary lesions suggests that diffuse lung seeding occurs. Since chest x-ray is used to identify metastasis, tumor may escape detection when they are below a critical size. Bilateral irradiation was carried out with each patient in this study and no patient developed contralateral metastasis.

Summary

Pulmonary metastasis to a single lobe in childhood cancer can be effectively managed with combined therapy. Of seven patients with completely controlled primary tumors who developed metastatic lesions confined to a single lobe, six are alive and well from two to six years after diagnosis of pulmonary metastasis. The approach to therapy that we have found effective includes immediate surgical resection of a lobar pulmonary metastasis followed by bilateral pulmonary irradiation and long term chemotherapy. A chest x-ray is obtained at six-week intervals for at least two years and long term follow-up is instituted.

Acknowledgement

We would like to thank Ms. Connie Honour for help in preparing and proof-reading the manuscript.

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Pcynodysostosis

Norman V. Lewis, Jr., M.D.*

Lexington, Kentucky

A rare and previously unreported form of dwarfism is present in Kentucky. It is characterized by pathologic fracture and consanguinity. Fracture healing occurs in a normal fashion. There is no mental retardation.

PYCNODYSOSTOSIS was first described in 1962 by Maroteaux and Lamy[1] and later by Shuler[2] as a separate genetic cause of dwarfism with a propensity for pathologic fractures. Since that time several reviews have appeared in the literature and it is now well established as a clinical entity. The following case illustrates the more pertinent features of this disorder.

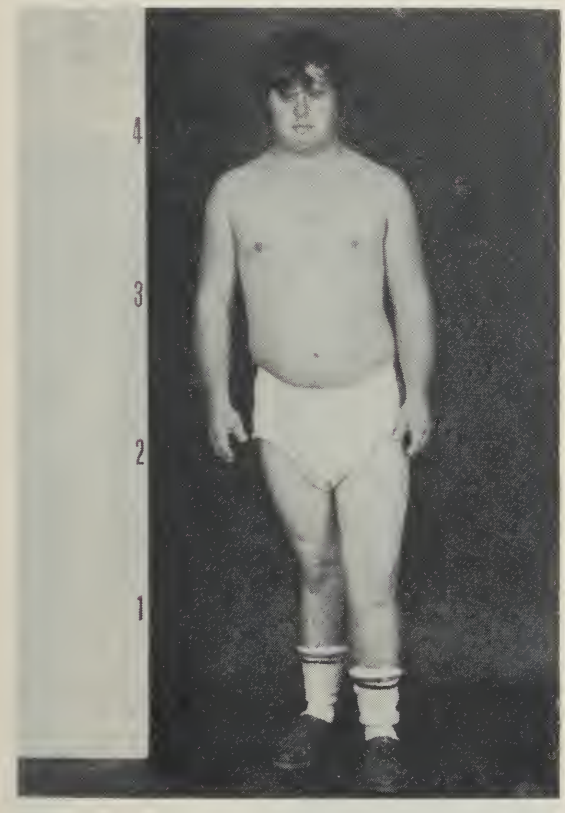


FIG. 1. Typical body habitus and face of pycnodysotosis

Case Report

A 22-year-old white male from a rural portion of Kentucky was admitted to the University of Kentucky hospital through the emergency room with the diagnosis of fracture of the left femur secondary to a minor fall. History revealed that the patient had fractured his right femur two years previously for which he had received open reduction and internal fixation with an intermedullary device. A previous diagnosis of pycnodysostosis had been established on a radiological basis. Following discharge from this previous admission, the patient failed to return for a clinic visit. Physical exam revealed a small fully developed white male with a swollen, tender and unstable left thigh. X-ray



FIG. 2

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FIG. 3. Short, stubby fingers with aplastic distal phalanges

of left femur revealed simple, midshaft fracture with some displacement. X-ray of right femur revealed well healed femoral fracture with an intramedullary device in place. X-rays of the hands, skull and pelvis were subsequently taken. Laboratory data was entirely normal. The patient underwent ORIF without complication and was doing well at six weeks follow-up.

Discussion

Pycnodysostosis is an inherited disorder of boney architecture resulting in dense and brittle bones. Henri de Toulouse-Lautrec was alleged to have this affliction.[3] A thorough review by Elmore[4] lists the most characteristic features as increased boney density, short stature, skull dysplasia, flattened mandibular angle, dysplasia of the terminal phalanges and clavicles, and normal lab values. The similarity in appearance of pycnodysostotic dwarfs regardless of race and sex is marked.[5]

The mode of inheritance is autosomal recessive with a high incidence of consanguinity. In the case presented, the patient had an older sister who died giving birth and was said to be identical in stature and appearance with the patient. The specific chromosomal defect is not known but it is not a chromosomal deletion.[6]

The physical features of pycnodysostosis are consistent and striking. It is characterized by proportionate dwarfism; in this case, the patient was 4 ft. 6 in. tall. The face is typical with frontal bossing, close set eyes which appear proptosed. The facial bones are hypoplastic and the angle of the mandible is flattened. (Figs. 1 and 2) The hands and feet are short with aplasia of the distal phalanges. (Fig. 3) No consistent neurologic or mental deficit has been reported.

Roentgenograms of the skull show persistent suture separation and brachycephaly. The mandibular angle is flattened and approaches 180°. (Fig. 4) The distal phalanges of the hands are aplastic giving them their typical

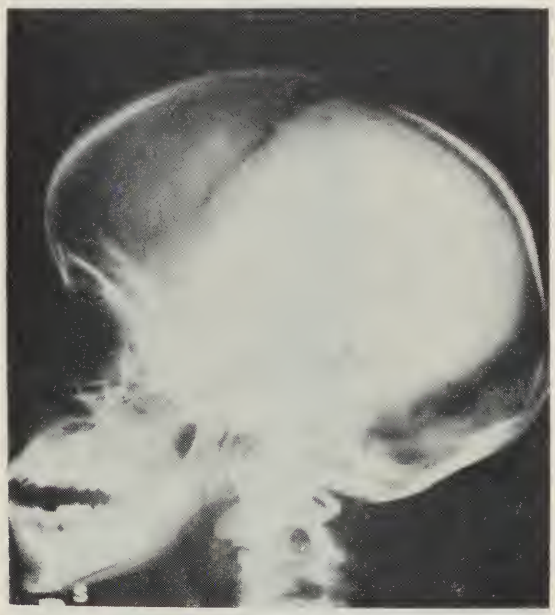


FIG. 4. Persistent suture separation and flattened mandibular angle



FIG. 5. Aplastic distal phalanges; typical of hands in pycnodysostosis

squared appearance. (Fig. 5) The long bones have an increased density and evidence of previous fractures may be noted.

Although studies of the microscopic lesions are scarce, it is reported to be similar to osteopetrosis except for the presence of a small medullary canal. Pathologic fractures are frequent due to the brittleness of the bone but the fracture heals normally as evidenced by the patient's previous clinical history. (Fig. 6) Fracture healed.

Summary

Pycnodysostosis is a rare and interesting form of dwarfism which is present in Kentucky. It is clinically important in its mode of inheritance and its tendency to pathologic fracture.

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FIG. 6. Normal healing of fractured femur

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GRAND ROUNDS

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Cholestatic Jaundice

THREE patients recently followed-up at the University of Kentucky Medical Center provide a basis for discussion of a difficult diagnostic and therapeutic entity.

Case #1: This 34-year-old 280 lb. multiparous female was admitted to another hospital in August, 1974, for jaundice and pruritis. She had experienced mild abdominal pain, but was otherwise asymptomatic. Laboratory values revealed a bilirubin 6.6/11.0, alkaline phosphatase levels twice normal, and SGOT levels five times normal. The patient underwent cholecystectomy and common duct exploration at that time, with operative findings of an acalculus gall bladder and a normal operative cholangiogram. A T-tube cholangiogram obtained three weeks postoperatively was interpreted as normal, and the T-tube was then removed.

The patient's jaundice subsided until October, 1974, when she was referred to the University of Kentucky Medical Center with recurrent jaundice. She was essentially asymptomatic and physical examination was unremarkable except for jaundice. Laboratory values included bilirubin 3.4/6.2, and alkaline phosphatase, SGOT, and SGPT in the range of two to three times normal on several determinations. The HHA was negative. It was pertinent that the patient had not been taking oral contraceptives but had been taking Methyldopa for two years, excluding a short period of time after her recent operative procedure.

A percutaneous liver biopsy revealed severe cholestasis, inflammation, and pericholangitis. An Upper GI series was normal. Endoscopic retrograde cholangiography showed no extrahepatic obstruction of the biliary tree (Fig. 1). The patient was subsequently discharged without medication and has remained asymptomatic. When recently seen as an outpatient, her liver function studies had returned to normal, with the exception of a persistently mildly elevated alkaline phosphatase.



FIG. 1

Case #2: This 18-year old nulliparous female noted pruritis and jaundice shortly after initiation of oral contraception in the fall of 1973. She was told that she had "infectious hepatitis" and discontinued the medication. Resumption of oral contraceptives in February, 1974, was followed by recurrence of the jaundice. She was subsequently hospitalized, at which time laboratory data revealed a bilirubin level 1.4/5.6, moderately elevated SGOT, SGPT, and alkaline phosphatase, and negative HHA.

The patient underwent cholecystectomy with findings of a single large stone in the gall bladder. No operative cholangiograms were obtained. The patient's postoperative course was

complicated by bleeding and hypotension requiring re-exploration. After subsequent rebleeding, the patient was transferred to the University of Kentucky Medical Center and underwent re-exploration with ligation of a small arterial bleeder. An operative cholangiogram was normal (Fig. 2), and a liver biopsy was obtained which showed portal cirrhosis and bile stasis.

Pertinent in the patient's past history was her childhood as a military dependent, during which time she experienced extensive foreign travel. At about age three years, there was an epidemic of hepatitis at the base in Turkey where she resided, though none of the family members manifested clinical evidence of the disease. The patient has remained asymptomatic since her discharge from the hospital and has normal liver function studies, except for a persistently elevated alkaline phosphatase level. In December, 1974, she had a repeat percutaneous liver biopsy which showed portal cirrhosis.

Case #3: This 17-year-old female was admitted to the University of Kentucky Medical Center with a three-month history of intermittent right upper quadrant discomfort, not related to meal ingestion. She denied fever or chills and had no exposure to hepatitis. The patient had been taking oral contraceptives for three months, and took an occasional "nerve pill" which she borrowed from a relative. Physical examination revealed jaundice but was otherwise unremarkable. Laboratory data revealed a bilirubin 4.0/4.8, mildly elevated SGOT and SGPT, and an alkaline phosphatase level four times normal. HHA was negative.

The patient had an infant with congenital heart disease, whose care necessitated her leaving the hospital prior to further diagnostic evaluation. She has chosen not to have any of these studies subsequently, but has remained asymptomatic and without jaundice while on no medications.

Discussion

To operate or not to operate?—this is the question posed when one encounters a jaundiced patient. Cholestasis is rather simply defined as the accumulation of bile in the liver and blood stream by its failure to reach the duodenum. This obstruction of the bile can occur at any site between the hepatic cells and the duodenum. Extrahepatic cholestasis is generally considered to be operatively remediable, while intrahepatic cholestasis is usually not operatively remediable. The physician's dilemma is to distinguish these two entities. A number of laboratory and other diagnostic tests are helpful, but often the clinical and chemical pictures are indistinguishable. Surgical discussions usually concentrate on extrahepatic problems, but attention to a review of some of the intrahepatic etiologies of cholestasis are important.

Occasionally a cholestatic phase of infectious hepatitis predominates, and this usually occurs between the third and tenth week after the onset of the disease. However, the previous stage may be clinically occult. The disease usually has an insidious onset with anorexia being the most prominent symptom. Abdominal pain is minimal if at all present. The transaminase levels are usually quite high but may only be moderately elevated. The alkaline phosphatase level, which is usually in the normal range in the non-cholestatic phase of infectious hepatitis, can be significantly elevated in the cholestatic phase. The HHA determination is helpful if it is positive, but does not exclude the diagnosis if it is negative. The importance of recognizing the patient with infectious hepatitis is emphasized by mortality rates up to 10 per cent and significant morbidity rates up to 35 per cent reported in patients who have undergone major operations during the active stages of infectious hepatitis.



FIG. 2

Drug-induced jaundice is probably the most commonly encountered type of intrahepatic cholestatic jaundice. Most notorious in the field of drugs is the phenothiazine group, which is responsible for more cases of this type than any other specific drug group. This is due to the incidence of jaundice in people taking these drugs and to the widespread prescribing of such agents. Jaundice is a manifestation of hypersensitivity in these patients, and as such, it is important to realize that it is unrelated to the dosage or duration of the drug and may occur after ingestion of a single tablet, even several weeks after ingestion of the drug.

Oral contraceptives appear to constitute a fairly frequent group of offending agents. As in the phenothiazine derivatives, it is a hypersensitivity reaction, thought to be related to estrogen and progestogen, though the exact mechanism is undetermined. It usually occurs during the first three months of use of these agents, is seen with greater frequency in females who have experienced the idiopathic jaundice of the last trimester of pregnancy, and is usually reproducible, as manifested by the second patient.

The use of a number of antibiotic agents has been associated with the development of cholestatic jaundice. Sulphonamides, PASA, the estolate preparation of erythromycin, and isoniazide are those agents most commonly reported. The presentation of jaundice associated with the use of the latter agent is very difficult to distinguish from active hepatitis. Tetracyclines can produce both cholestatic jaundice and hepatocellular jaundice, which is dose related and has most commonly been seen in patients with impaired renal function and in postoperative patients receiving large doses of the drug.

Cholestatic jaundice associated with the use of halothane, sometimes referred to as "halothane hepatitis", was the subject of much controversy over the past decade, with factual data often being clouded by a considerable degree of emotionalism. However, this is a real entity, and it is seen most frequently in patients with multiple exposures to the agent, particularly over a short period of time.

A long list of miscellaneous other agents have been associated with the development of cholestatic jaundice. Included in these are chlordiazepoxide, one of the most frequently prescribed drugs in this country; thiazide diuretics; oral hypoglycemic agents; anti-thyroid medication; and certain laxatives. It is important to know that the great majority of drug-induced cases of jaundice are relatively mild with respect to liver damage, and these changes are usually reversible.

Patients with several types of chronic liver disease may present with jaundice. Post-necrotic cirrhosis uncommonly is responsible for jaundice but has exacerbations during which jaundice may be seen. Most of these patients carry the stigmata of chronic liver disease, and hypoalbuminemia is the most consistent laboratory finding. Chronic active hepatitis is a very confusing disorder and may represent an autoimmune disease. It is seen primarily in females, with a great many of them being in the second decade of life. It often presents with a clinical picture of acute infectious hepatitis, and markedly elevated transaminases are common. Primary biliary cirrhosis represents another vague entity which may simulate extrahepatic obstruction, particularly since marked increase in alkaline phosphatase levels are often seen. It is usually a disease of prolonged duration, but because of the confusing clinical picture, the diagnosis is often established at operation. Pericholangitis developing in patients with long-standing chronic ulcerative colitis may be confused with extrahepatic obstructive disease and should be considered in any patient with ulcerative colitis.

A number of systemic diseases may have jaundice as one of their manifestations. Congestive heart failure, Hodgkin's Disease, hemolytic anemia, and a number of bacterial, viral, and mycotic infectious processes are examples of this, and emphasize the necessity of a complete systemic review of patients with jaundice. Hepatic abscess formation is a specific disease associated with jaundice, and hepatic scans may be helpful in diagnosing such cases when suspected.

Alcoholic hepatitis occasionally has a cholestatic phase marked by rising bilirubin and alkaline phosphatase levels, suggesting extrahepatic obstruction. One should be extremely cautious in this regard, as operations upon such patients are reported to carry extremely high morbidity and mortality rates.

Postoperative jaundice is an extremely difficult dilemma, in that there are a combination of factors, any one of which individually could account for jaundice. Blood loss, especially that

requiring massive transfusion; hematoma resolution; peri-operative hypotension; hypoxia; anesthetic and therapeutic agents; and infection may all play a role, and identification of a single responsible factor is usually impossible. Hypoxia is probably the most important factor, and superimposition of other elements contributes to the development and severity of the jaundice.

There are a number of metabolic disorders including Dubin-Johnson syndrome and familial recurrent jaundice, which have been described in patients with cholestatic jaundice. However, these are uncommon and may usually be recognized with sufficient evaluation.

Emphasis in the management of the patient presenting with jaundice must be placed on several facts. A detailed history must be obtained, seeking symptoms of previous biliary tract disease, and particularly a history of drug ingestion of any type. Because of the innocuous nature and the hypersensitivity mechanism of some of the offending drugs, history-taking must often be quite direct and lengthy. Physical findings are so widely varied that no particular characteristics are helpful in making the diagnosis of intrahepatic cholestatic jaundice. Laboratory evaluation is helpful as long as one realizes that no single laboratory study is dependable. The alkaline phosphatase level has been most often misused as an index of extrahepatic obstructive disease, and is probably the most helpful when it is normal in patients with elevated transaminase levels. The pattern of repeat laboratory studies is extremely important in making the diagnosis of intrahepatic cholestasis.

Various radiologic studies have been advocated for the evaluation of the jaundiced patient. Each has been helpful in a number of individual cases but none has been a consistent aid in making the diagnosis. Liver-spleen scan is of questionable help. Upper GI series with hypotonic duodenography is useful only for very gross lesions, but should be included to rule out such problems. Oral cholecystograms and IV cholangiograms are usually not helpful because of the level of serum bilirubin, though drip cholangiogram with tomograms may occasionally provide useful information. Percutaneous cholangiography has been helpful in experienced hands, but carries with it the morbidity of discomfort, infection, hemorrhage, and occasional need for exploratory celiotomy. Percutaneous trans-jugular cholangiography is promising, because it avoids most of these latter problems, but has not been employed at this institution. Endoscopic retrograde cholangiography appears to be the procedure of choice for the future, with the percentage of successful cholangiograms being almost directly proportional to the experience of the endoscopist. The procedure carries with it a low morbidity, with sepsis and pancreatitis the most serious reported.

Liver biopsy is not as diagnostic for intrahepatic cholestasis as was once thought. It provides supportive evidence, but is certainly not reliable as the only criterion for determining the course of treatment.

Operative exploration in the jaundiced patient is indicated by a progression of signs, symptoms, and laboratory values. Jaundiced patients require extremely careful preoperative and postoperative management, with particular attention to hydration and preservation of renal function. Hepatocellular damage should be avoided, and meticulous attention should be given to intraoperative hemostatis. Intraoperative cholangiography is imperative in every jaundiced patient undergoing operation.

In summary, intrahepatic cholestasis is a great mime of extrahepatic obstruction of the biliary tree. Most important in the evaluation of the jaundiced patient is to bear in mind that jaundice is seldom an indication for emergency operation. In the absence of cholangitis or suspected cholangitis, a period of close observation may be extremely helpful. Liver function is not likely to decline nor possibility of tumor resection decrease in a few weeks. This must be weighed against possible irreversible liver damage from obstruction, but the latter is a very low-risk complication.

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EDITORIALS

Help Us Meet The Challenges Ahead

Five years ago, this writer was privileged to serve as Chairman of the committee which recommended that the Association adopt a five-year plan in considering dues requirements and proposed that the dues for 1970 be raised from $80 to $130. It was with considerable satisfaction that we saw the House of Delegates accept those recommendations without a dissenting vote.

With that background, we can well appreciate the many hours of hard work, analysis of the operations and financial requirements of the Association, and the soul-searching that is reflected in the report that you can find on page 379 of this issue of *The Journal.* Doctor Ballard Cassady and his committee are to be congratulated, and we owe them a debt of gratitude for their contribution.

The responsibilities of organized medicine today are more awesome than ever before. Individually and collectively, we lean more heavily on our professional organization each day, albeit subconsciously or unconsciously in some instances. It is unfortunate that some of us fail to recognize how much we depend on our Association, and how much is done in our interest each day, until a crisis develops which touches us personally.

Since our last dues increase five years ago, the demands placed on the KMA officers and staff have perhaps tripled. A never-ending list of new programs and problems have been handed to them for implementation or solution while the old projects, it seems, must be continued. During the past five years, we have seen the creation of 15 new KMA committees.

The medical liability insurance crisis alone has demanded almost the full-time efforts of a staff executive for a period of several months working with the AMA, the Insurance Commissioner, the Legislative Research Commission, our own committees and our individual members confronted with this crisis.

In his report to the Association, Doctor Cassady quotes two paragraphs from the report of our committee five years ago. As Doctor Cassady observed, these statements were never more true than they are today. Medicine must be united today. We must be certain that our Association has the financial resources to do what must be done for us as physicians and for our profession.

Those physicians who are, or who have been, involved in the activities of organized medicine, are quite cognizant of the tremendous variety of activities, and the time, effort and dedication devoted to them for the benefit of all. Those who have not been involved should become active in their organization. It would then be from a position of knowledge and understanding that you could wholeheartedly support the recommendations of your elected leaders.

The proposed increase in dues to $225 (less than twenty tax-deductible dollars per month), seems to be a pretty small price to pay when one considers the return on the investment. Your officers, trustees, committees and executive staff have all done their homework and the need for this dues increase has been well documented. Let us hope that a far-thinking, progressive and knowledgeable House of Delegates will once again reach a unanimous decision on this crucial matter in September.

HBA

Special Report on Proposed Dues Increase

KMA BUDGET COMMITTEE

Ballard W. Cassady, M.D., Pikeville, Chairman

That the Dues for Active Membership of this Association for the Next Five Years be a Tax Deductible $225, Effective January 1, 1976

Charge to Committee

In recent years, KMA has set a pattern of projecting its needs as an Association and the financial requirements to meet those needs over a five-year period. This has called for the House of Delegates to authorize a dues increase only once each five years, rather than concern itself more often with these budgetary matters.

The 1974 KMA House of Delegates "instructed the Budget Committee to create a new five-year (dues) plan for consideration in 1975." The Reference Committee and House further stated that it was anticipated that such a plan would recognize the need for a dues increase to cover operating expenses and increases in reserves based upon full and appropriate justification.

The members of our Budget Committee included John P. Stewart, M.D., Frankfort; William T. Watkins, M.D., Somerset; David A. Hull, M.D., Lexington, (President-Elect and Ex-officio); Keith P. Smith, M.D., Corbin, (Treasurer and Ex-officio); and Ballard W. Cassady, M.D., Pikeville, Chairman. The Committee gave much thought and study to its proposal of increasing dues to $225 annually for regular members. Our report was reviewed in detail and numerous questions answered when the Executive Committee met on March 26-27 to study the 1975-76 Association budget and dues increase.

Because of the importance of this matter to all the members, it was felt desirable to distribute information as widely as possible through *The Journal* so that the full membership, as well as the House of Delegates, may be knowledgeable when the matter is presented for discussion next fall.

Background

We reviewed our experience over the past five years. We studied the current budget and the financial statement for the first six months of this fiscal year, and we think you can be proud of the fiscal policy of your Association.

When the Ad Hoc Committee on Finances reported to you five years ago, two paragraphs were included, which we feel to be even more pertinent today and worthy of repeating.

> We can view with pride the increased growth in stature and in numbers, as well as the many accomplishments of the Association during this space of years. These things didn't just happen, however, but are the result of greater awareness of our responsibilities, and the diligence and dedication with which our members and staff have pursued our purpose—to serve the physician, the profession and the public.
>
> In this fast-changing world, an era of exploding scientific knowledge, challenges to the medical profession from all sides, and scrutiny by the consumer, one does not need a crystal ball to recognize that our activities and responsibilities must continue to expand if we are to remain a vibrant, progressive organization attuned to the times. An inventory of the resources available to meet these challenges reveals an abundance of manpower—talented, knowledgeable, dedicated physicians and staff ready and anxious to move ahead—but a financial structure that has not kept pace with the present, let alone the demands of the future.

In 1970, the KMA House of Delegates approved a five-year financial program, which called for a regular member dues of $130 per year. The projected financial program included an inflationary factor of 21.9 per cent, which was the cost of living for the previous five-year period. The actual inflationary trend during the five-year period from 1970 to 1975 has been in excess of 35 per cent. The KMA dues of $130 approved in 1970 has a purchasing power of approximately $80 today.

Operating Expenses

The economic incompatibility of inflation and recession, shortages and the energy crisis have affected virtually every individual, business and organization in the country. You, in your own practice, are well aware of inflation's impact on your operating cost.

Table 1 indicates a 56.5 per cent increase from the base period of 1967 to January of 1975, with 12.2 per cent of this increase coming in one year—1974. The index and inflationary factor provided by economists show both the projected Consumer Price Index and estimated inflationary factor to January, 1980.

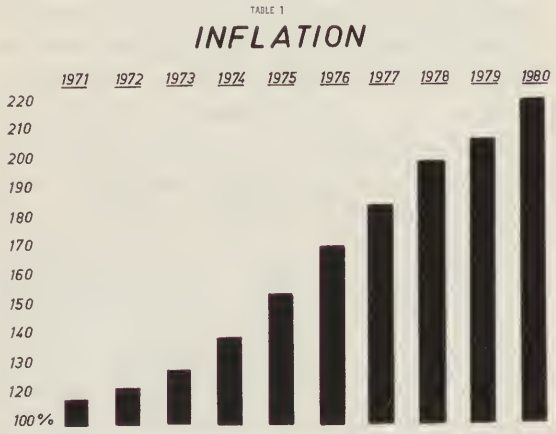


TABLE 1

It would have been most difficult in 1970 to have forecast the inflationary spiral that has occurred. Yet, through careful planning and expenditure control, we have been able to stay within this budget. Actually, our five-year plan called for us to have completely depleted our reserves, but by cutting down everywhere possible, this has not become necessary. As a matter of fact, hopefully, our current but inadequate reserves will have to be utilized very minimally to complete this calendar year.

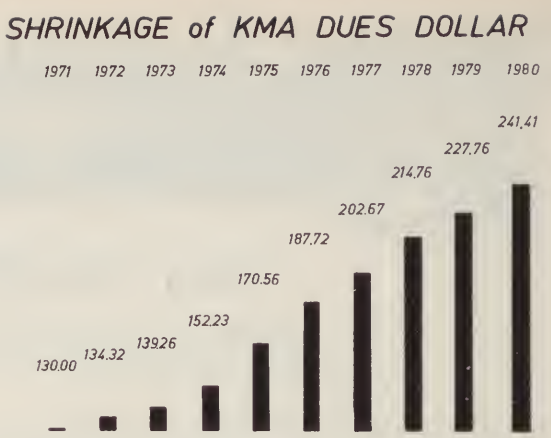


TABLE 2

Each year the challenges to organized medicine have multiplied. A conscientious staff, constantly striving to provide efficient and quality work, is aware of skyrocketing costs as can be observed in maintenance, conducting annual and other meetings, printing, postage, supplies, travel; in fact, in all our activities. Government programs at all levels have been a major contributor to the mandated rapid growth of Association activities. In the past five years, your KMA has initiated many new programs to keep medicine's voice strong in a society that becomes more complex by the day. There is a myriad of activities underway daily at the Headquarters Office. On some days there are as many as six meetings, each of which involves a varying degree of preparation and followup.

Using the information we have available today, we have charted the value of the 1971 dues dollar of $130 to show the actual purchasing power from 1971 through 1974, and for the projected period to January, 1980. (Table 2)

The Headquarters Office

In 1972, we completed an addition of some 10,000 square feet of floor space to our Headquarters building. The original building, dedicated in 1962, consisted of 7,000 square feet. While the value of our Headquarters building is currently $554,297.00, we still owe $263,-869.00 on the loan for the building addition. The addition is being utilized for much needed staff room, additional meeting space for committees, and special seminars. In 1972, the Division of Medical Licensure moved into the KMA Headquarters Office.

As you can understand, a building that was completed in January of 1962 demands more and more repairs to keep the building appearing and functioning properly and the costs of obtaining these services continue to rise.

Again, because of the constant activity revolving around our Headquarters building, it is anticipated that we will soon have to enlarge the parking lot, which overflows almost daily.

Reserve Fund

It has been a normally accepted policy that a non-profit organization such as KMA should have a reserve fund equivalent to one year's operating expenses in order to guarantee the financial stability of the organization. As reported to you earlier, we do have a reserve fund as of this writing. It is approximately $145,000, although we do anticipate having to utilize some of it prior to the end of calendar year 1975. The projected dues increase would give us a reserve fund at the end of five years of $449,172 as indicated in Table 3. A year's operating budget at that same time would be projected to be $643,530.

KMA's fixed costs continue to rise at an accelerating pace. A few examples of some of the uncontrolled increases in such costs since 1971 to January, 1975, include the cost of paper, up 45 per cent; printing costs which have risen 18 per cent; postage up at least 53 per cent; fuel to heat and light the Headquarters Office is up 66.6 per cent; just to name a few. We also have other needs that have been delayed but which are essential. Much of the equipment from printing machine to typewriters is becoming worn and in need of replacement. If you are like the many physicians who call the Headquarters Office, you will find that too often you receive a busy signal. It is going to be necessary for us to put in a completely new telephone system because our current system has been expanded to capacity, yet cannot handle the business demanded of it. Our needs on such matters are all encompassing.

Headquarters Staff

As has always seemed to be the case, our staff is heavily overburdened, and we seem to continually add new projects for them to handle without being able to find much that can be deleted. As an example, claims and utilization review and activities in continuing medical education are sufficiently significant to mandate the full time of one executive staff person, yet at the present time, these are being handled on top of the routine assignments already being performed by staff. In addition, today we find ourselves continually confronted by urgent and time-consuming problems such as the liability insurance crisis which hit with the beginning of 1975, and laws and regulations passed by the Federal and State Government. We depend on our staff to prepare testimony on our behalf and to follow through to the best of their ability to get medical matters performed in the best interest of physicians and their patients. Although we were opposed to the PSRO Law, and its implementation is in no way physically or administratively connected with KMA, it is another example of just one "spin off" item that does create a demand upon the time of our officers and staff.

KMA's Executive Staff has not been increased since 1969, yet the workload has risen considerably. In fact, since one Executive was assigned to the Kentucky State Department of Medical Licensure in 1972, and the other staff members covered his administrative duties, we have a net loss of one Staff Executive based on the assignments at that time. Add to this the programs developed over the past five years

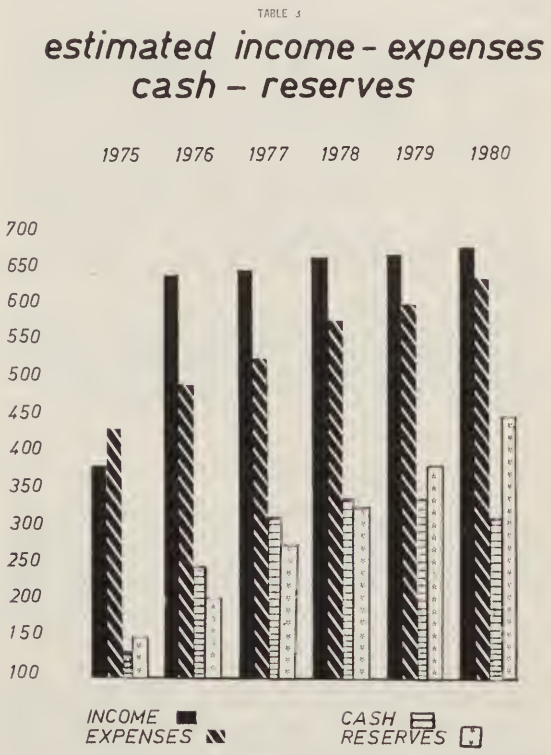


TABLE 3

and you can see the burden our staff is working under.

If we reviewed briefly responsibilities of staff and requirements of KMA today that did not exist even four or five years ago, an incomplete list would include medical licensure matters, centralized dues billing from KMA Headquarters, a statewide Claims and Utilization Review System, administration of Interspecialty Council (administrative services, development of Norms for Care, etc.), in-house printing, heavy involvement in writing testimony for state and federal regulations, increased Judicial Council activity, the Interim Legislative Committee system, meaning we nearly have annual Legislative Sessions (attending, listening and testifying at committee meetings), many new programs such as new physician seminars, Public/Patient Relations Seminars for the physician's office assistant, Emergency Health Care Seminars, and increased liaison with allied groups.

Further, new committees have been organized to provide new services such as Business Management and Services Committee (insurance plans, auto and equipment leasing, group travel, etc.), Physician-Attorney Liaison Committee, KMA-KNA Joint Practice Committee, more total involvement from student level to national level (AMA), a phenomenal demand for increased committee members and representation of KMA at state, regional and national meetings. Add to this major and crisis issues like liability insurance, National Health Insurance, HMO's (which could cause reactivation of Kentucky Foundation for Medical Care) and it is easily understood that KMA's output to and for the membership and the public is two- or three-fold what it was a mere five years ago.

We feel a new executive and secretary should be a by-product of our increased dues to implement those programs we vote into existence.

Discussion

Again, we would like to quote from the report of the Ad Hoc Committee on Finances chaired by Henry Asman, M.D., five years ago in its discussion which states as follows and seems so pertinent to us today:

> The same inflationary pressures that have forced us to increase our fees in order to support and protect our families, to cover our increased overhead, to pay increased dues to other professional and civic organizations and to the country clubs to which we belong, have had their effect on KMA. It is only reasonable, then, that we should expect, and be willing, to increase our annual contribution to the organization that is dedicated to the best interest of the physician, the profession and our patients.
>
> There are hundreds of members who are the most knowledgeable of the programs and activities of the Association—through their service as officers, trustees, committeemen, and in other ways. For these physicians this article is unnecessary because they realize that their investment in KMA is probably the most valuable contribution to the profession that is in their power to make.
>
> There are others, however—the majority in fact—who may not be so knowledgeable, do not participate in KMA activities, do not really understand the Association's efforts in their behalf, and unfortunately, have never had an opportunity to visit the Headquarters Office to see their organization "in action." It may be somewhat idealistic, but would be quite rewarding, if every member, and especially every Delegate—who determines KMA policy—could spend one whole day in the Headquarters and observe our capable staff and some of our dedicated committees at their work.
>
> We have been most fortunate at KMA to have been able to accomplish what we have done, to maintain the prestige and stature of our Association . . . Let us be realistic and provide the financial stability to our Association that will assure its continued growth in the pursuit of our goals.

Recommendations and Summary

We recognize that inflation alone almost mandates that we increase our dues from $130 to $225 annually when we are considering at least a five-year dues span without any additional services or activity.

Recognizing that your dues are tax deductible, and by applying your tax bracket to the dues, you can readily see that KMA dues constitute a very minor cost to you.

If, in fact, we can base this amount of increase practically on inflation alone, as is done in Table 1, then we can surely recognize that there are many other factors that demand financing to include more and better equipment; more traveling demanded by officers, committee chairmen, and staff; that we add personnel to help fill the void existing in the past few years and to meet new demands being placed upon staff; new programs like mandatory continuing education; and daily crisis problems like professional liability insurance.

(Continued on Page 386)



Financing The Future

Paul J. Parks, M.D.*

AT the last meeting of the Board of Trustees we heard a report from Doctor Ballard Cassady who is serving as the Chairman of the Budget Committee this year. Over the last several years, KMA has set a pattern of projecting its needs as an Association and the financial requirements to meet those needs over a five-year period.

In 1974, the KMA House of Delegates instructed the Budget Committee to create a new five-year dues plan for consideration in 1975. The Reference Committee and House further stated that it was anticipated such a plan would recognize the need for a dues increase to cover operating expenses and increases in reserves based upon full and appropriate justification.

Due to the importance of this matter, Doctor Cassady's report is being distributed through *The Journal* and is being presented to as many of the members of the Association as possible by the Trustees.

Projecting Our Dues

In 1970, the House of Delegates approved a five-year financial program, which called for a regular member dues of $130 per year, an increase from $80.

The projected financial program was based on an inflationary factor of **21.9 per cent,** which was the cost of living for the previous five-year period. The **actual** inflationary trend during the five-year period from 1970 to 1975 has been in excess of **35 per cent.** Thus, the KMA dues of $130 approved in 1970, has a purchasing power of only $80 today . . . A complete wipeout of our increase five years ago.

Inflationary Factors

The economic incompatibility of inflation and recession, shortages and the energy crisis have affected virtually every individual, business and organization in the country. You, in your practice, are well aware of inflation's impact on your operating cost.

Of the 35 per cent increase from the base period of 1971 to January of 1975, 12.2 per cent of this increase came in 1974.

The index and inflationary factor provided by economists show both the projected consumer price index and estimated inflationary factor to January, 1980, will continue at a yearly rate of six to ten per cent.

It would have been most difficult in 1970 to have forecast the inflationary spiral that has occurred. Yet, through careful planning and expenditure control, we have been able to stay within this budget. Actually, our five-year plan called for us to have completely depleted our reserves, but by cutting down everywhere possible, this has not become necessary. As a matter of fact, hopefully our current but inadequate reserves will have to be utilized very minimally to complete this calendar year.

Each year the challenges to organized medicine have multiplied. A conscientious staff, constantly striving to provide efficient and quality work, is aware of skyrocketing costs as can be observed in maintenance, conducting annual and other meetings, printing, postage, supplies, travel; in fact, in all our activities. In the past five years, your KMA has initiated many new programs to keep medicine's voice strong in a society that becomes more complex by the day, while at the same time maintaining most of the older programs.

Using the information we have available today, we can chart the value of the 1971 dues dollar of $130 to show the actual purchasing power from 1971 through 1974 and for the projected period to January, 1980. It takes

*Chairman, KMA Board of Trustees

$187.72 to purchase today what $130 purchased in 1971 and it is anticipated that it will take $241.41 to make a similar purchase in 1980.

The proposed dues increase of $95 a year would give us a reserve fund at the end of five years of approximately $449,000 or approximately one-half of a year's projected operating expense of $643,000. This takes into consideration inflation alone and does not consider new programs, additional staff, etc.

KMA's fixed costs continue to rise at an accelerating pace. A few examples of some of the uncontrolled increases in such costs between 1971 and January, 1975, include the cost of paper, up 45 percent; printing costs, which have risen 18 per cent; postage up 53 per cent; and the fuel to light and heat the Headquarters Office is up 66.6 per cent. We have other needs that have been delayed, but which are essential. Much of the equipment in the Headquarters Office is becoming worn and in need of replacement. It will be necessary for us to put in a completely new telephone system soon because our current system has been expanded to capacity, yet cannot handle the business demanded of it.

Increased Activity

The majority of our activity surrounds the Headquarters Office and our staff. We seem to continually add new projects for them to handle without being able to find much that can be deleted, and, in addition, our Executive Staff has actually decreased in number over the past five years.

In 1969 there were five executives. The same held true in 1970 and in 1971, an executive was hired to set up a Claims and Utilization Review Program through KMA. Although he was a member of KMA's staff, his salary and supporting funds for claims and utilization review came through a grant from Comprehensive Health Planning.

The following year, 1972, legislation was passed which created a separate Board of Medical Licensure, which is housed at the KMA Headquarters Office. Instead of hiring another individual to manage this new service, one KMA staff member was assigned responsibility for setting up and running the Licensure Department, and his previous duties were spread among the other executives, thus actually reducing staff.

In 1974, when the grant for peer review expired, it was the judgement of the Board that the program for peer review and related activities must be continued and the staff for conducting it was retained. Peer review is still a full-time job but we are adding utilization review, the development of Norms for Care and a mandatory continuing medical education program to an already overburdened individual.

In the five years between 1969 and 1975, three major programs have been dropped. These included the Interim Meeting, Senior Day Program and new member Orientation. However, in the same five-year period the new programs added included: administration of the Kentucky Department of Medical Licensure; a statewide central dues billing system from the Headquarters Office; a program of mandatory continuing education was developed, which includes accrediting institutions planning to give programs and the maintenance of records of compliance. The Interspecialty Council, which performs administrative services for all specialty groups and has been extremely influential in the development of Norms for Care and other specialty oriented projects, was added.

Increased Auxiliary activities required adding part-time staff; the Scholarship Fund workload continues to increase annually; what we call PSRO spin-offs, the routine monitoring of the PSRO, demands daily attention. For it or against it, we still have to be knowledgeable about it and be able to take appropriate action when indicated.

State and national legislative matters have multiplied manyfold in the past five years. New regulations, proposed changes in current regulations and proposed legislation pass through the Headquarters Office daily. Staff must read and try to digest and interpret these would-be laws, and maintain continuous communication with our Congressmen. Considerable time is spent in the preparation of written and oral testimony. Staff is also called upon to attend and report on interim committees of the State Legislature and, because of the interim committee system, there is almost as much activity now as there is in the biennial sessions. Over the past five years there has been a considerable influx of all types of new government-mandated involvement—Health Maintenance Or-

ganizations, Comprehensive Health Planning, utilization review and the Medicare and Medicaid Programs continue to plague us.

There has also been an increase in Judicial Council activity (the Judicial Council must meet numerous times annually). Increased public relations activities demand increased liaison with the media. Due to increased demands on KMA to comment on various activities and take part in actions affecting organized medicine, staff is now writing and giving more speeches on our behalf. Our staff is continually confronted with unforeseen crisis projects, such as the current professional liability insurance situation and key legislative matters. All this has brought about a subsequent increase in the time required to maintain office equipment, supplies and the Headquarters building . . . and did you know we still owe in excess of $260,000 on our building which will not be paid for until 1987.

New Programs

But this is not all. Many new programs have been added . . . a few examples are the Emergency Health Care Seminar, which is given once a year and which enjoys an attendance of some 300 people.

The Public Relations Committee has developed and produces Seminars on Patient/Public Relations for the Office Assistant. These are to help your office assistant do a better job for you in dealing with your patients. The Public Relations Committee has also established a Practice Management Workshop which has been very successful and which helps new physicians learn the "in's" and "out's" of establishing a practice.

There are many special projects now being undertaken, such as the "Medical Critical Dimension, 1975" programs held this year by President Gardner in five selected areas of the state. There have been tangible membership benefit programs developed, such as the life and health insurance coverage, auto and equipment leasing programs and travel programs.

As mentioned earlier, in-house printing is a new undertaking and is utilized by several of the specialty organizations. It gives us much more flexibility and responsiveness with regard to membership communication and has resulted in considerable savings over having the printing done elsewhere.

In addition to the new programs added, a substantial number of new committees have also been added over the past five years to include Physician-Attorney Liaison Committee, KMA-Kentucky Nurses Association Joint Practice Committee, Business Management and Services Committee, Claims and Utilization Review Committee, a State **and** National Legislative Activities Committee, Committee on Physician's Health, Cancer Committee, Committee on Health Care of the Poor, Long-Term Health Care Committee. In addition, we have added a Public Relations Committee, established an Interspecialty Council and have an Advisory Committee to the Kentucky Peer Review Organization. We currently have Ad Hoc Committees on the External Structure of KMA, on Mental Health-Mental Retardation and on Foreign Medical Graduates.

It is interesting to note that from 1969 to 1974, the number of KMA committee meetings has **doubled.**

1975 is busier than ever and the Legislature isn't even in session.

We recognize that inflation alone almost mandates that we increase our dues from $130 to $225 annually when we are considering at least a five-year dues span without any additional services or activity.

Recognizing that your dues are tax-deductible and by applying your tax bracket to the dues, you can readily see that KMA dues constitute a very minor cost to you . . . and perhaps the best bargain you get each year.

If, in fact, we base this amount of increase practically on inflation alone, then we can surely recognize that there are many other factors that demand financing, such as better equipment; increased travel, which is demanded of our officers, committee chairmen and our staff; and the need to add personnel to help fill the void existing in the past few years in order to meet the new demands being placed upon our staff and new programs like mandatory continuing education and the daily crisis problems, such as professional liability insurance.

We have plans for a stronger advocacy role to be played by KMA in the form of a department of negotiations; people trained to negotiate with third parties, hospitals and other agencies for KMA members. We believe this can be done with this increase and note that several other states have mandated dues increases con-

siderably higher than we are proposing, such as Wisconsin, which has just raised dues from $175 per year to $300 per year.

Summary

A $225 dues, it is anticipated, would provide a financial base from which we can meet the demands already upon us and allow the flexibility we must have to cope with the future challenges that will undoubtedly arise.

There are many, many reasons demanding that KMA, on your behalf, enlarge the scope of its activities. For those reasons, we feel that the $95 increase to $225 is a conservative recommendation for our needs. Your Board of Trustees and the Executive Committee of the Board have studied the Budget Committee's recommendations and were unanimous in their acceptance and endorsement of their findings. We hope every KMA member joins us in a unanimous support of our professional organization at a time when we need it the most.

Special Report on Proposed Dues Increase

(Continued from Page 382)

A $225 dues, it is anticipated, would permit the addition of necessary staff and provide a financial base from which we can meet the demands already upon us and allow the flexibility we must have to cope with the future challenges that will undoubtedly arise.

There are many, many reasons that are demanding KMA, on your behalf, to enlarge the scope of its activities. For this reason, we feel that the $95 increase to $225 is a conservative recommendation for our needs. Unless something drastic happens, we can assure you this dues increase will last KMA for the next five years, and hopefully, even longer. Should you have any questions, we will welcome your writing us so that we can all go to the Annual Meeting in September with as much knowledge as possible.

(**NOTE:** While this paper discussed the fact that the $225 dues would permit us to implement the hiring of a new executive and secretary, none of the projection figures actually include the funding of such an executive and secretary.)



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propantheline bromide

Indications: Pro-Banthine is effective as adjunctive therapy in the treatment of peptic ulcer. Dosage must be adjusted to the individual.

Contraindications: Glaucoma, obstructive disease of the gastrointestinal tract, obstructive uropathy, intestinal atony, toxic megacolon, hiatal hernia associated with reflux esophagitis, or unstable cardiovascular adjustment in acute hemorrhage.

Warnings: Patients with severe cardiac disease should be given this medication with caution. Fever and possibly heat stroke may occur due to anhidrosis.

Overdosage may cause a curare-like action, with loss of voluntary muscle control. For such patients prompt and continuing artificial respiration should be applied until the drug effect has been exhausted. Diarrhea in an ileostomy patient may indicate obstruction, and this possibility should be considered before administering Pro-Banthine.

Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

How Supplied: Pro-Banthine is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg.

SEARLE **Searle & Co.**
San Juan, Puerto Rico 00936

Address medical inquiries to: G. D. Searle & Co.
Medical Department, Box 5110, Chicago, Ill. 60680 481

"Antiacid" action for ulcer patients...

one of the many things you need in an anticholinergic.



Pro-Banthine is considered adjunctive in total peptic ulcer therapy that may include diet, conventional antacids, bed rest, and other supportive measures.

Pro-Banthine is provided in several different dosage forms which will meet virtually any clinical need. It is just as versatile in filling patient needs, among which are:

"Antiacid" action—Pro-Banthine® (propantheline bromide) reduces gastric secretory volume and resting total and free acid.

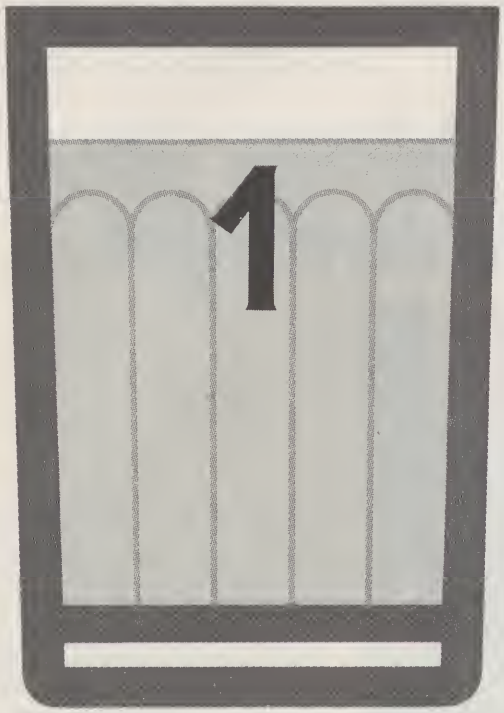
"Analgesic" action—Pro-Banthine helps to control the acid-spasm-pain complex.

Vigorous anticholinergic action—Pro-Banthine® Vials, 30 mg., are for intramuscular or intravenous use when prompt and vigorous anticholinergic action is required.

Mild anticholinergic action—Pro-Banthine® Half Strength, 7.5 mg. tablets, for more exact adjustment of maintenance dosage in mild to moderate gastrointestinal disorders.

Pro-Banthine®
(propantheline bromide)

a good option in peptic ulcer





Adequate fluid intake

Frequent voiding

The 3rd Basic

Gantanol®
(sulfamethoxazole) B.I.D.

Four tablets (0.5 Gm each) STAT- then 2 tablets B.I.D. for 10-14 days

Basic therapy with convenience for acute nonobstructed cystitis

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic non-obstructed urinary tract infections (primarily pyelonephritis, pyelitis, and cystitis) due to susceptible organisms. ***Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials, including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

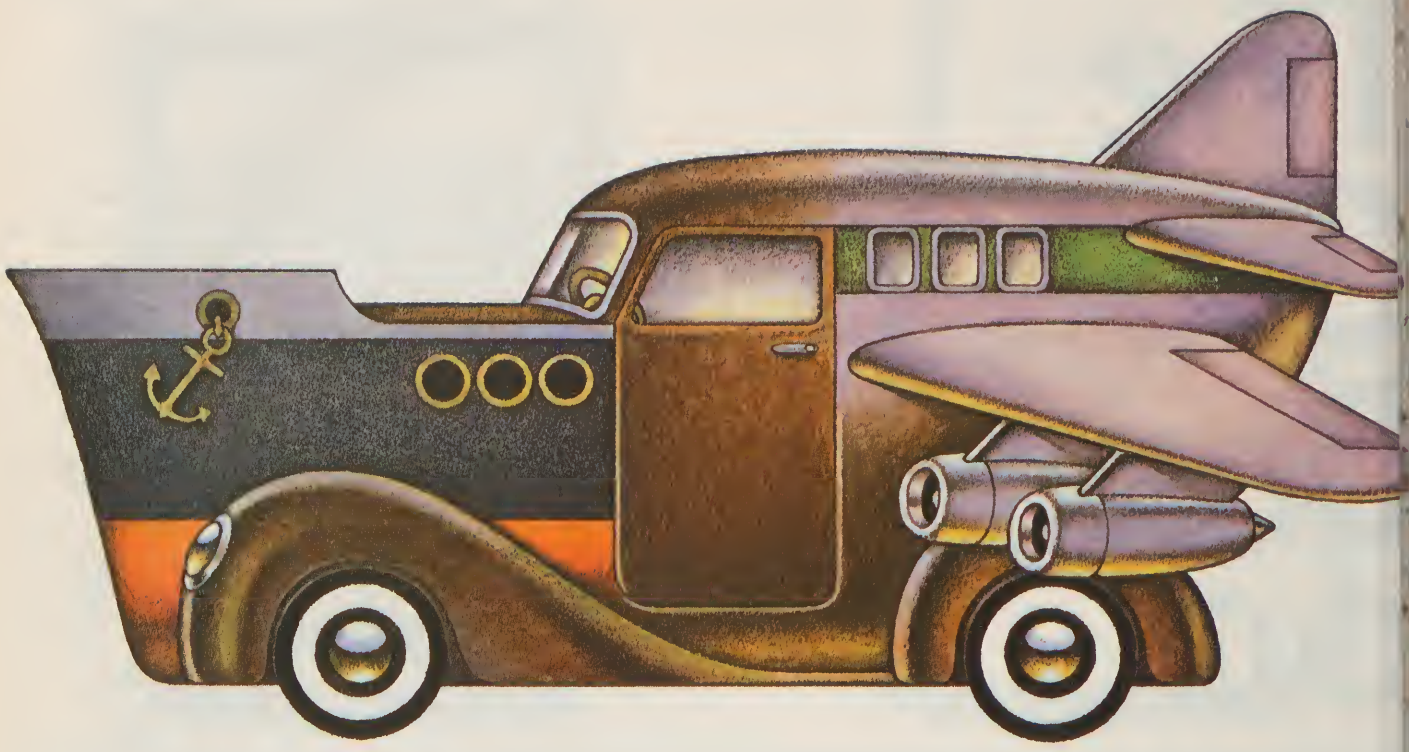
Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

- **Effective against susceptible E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis and, less frequently, Proteus vulgaris**



On land, sea, and in the air...

Up to 24 hours of effective control with a single dose...in nausea, vomiting and dizziness associated with motion sickness.

Dosage: 25 to 50 mg. 1 hour before travel.

Available on prescription only.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25 Chewable Tablets
(meclizine HCl) 25 mg.

for motion sickness

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

Ancient Acceleration and Proliferation of the Liberation

Doctor D. P. Hall of Louisville — a medical history buff—sent me the 1959 SGO edition of *From a Surgeon's Library*. In it was an article by a mutual friend, E. Lee Strohl, M.D., about the "Ladies of Lynn—Emphasis on One". This had to do with the Vegetable Compound of Lydia Pinkham and in the article were poems that fascinated many in the 1880's:

Elsie W. had no children,
There was nothing in her blouse,
So she took some Vegetable Compound;
Now they milk her with the cows.

There's a baby in every bottle,
So the old quotation ran.
But the Federal Trade Commission
Still insists you'll need a man.

Lydia Pinkham was born in Lynn, Massachusetts. Susan B. Anthony lived nearby and in the same community; a neighbor and friend was Mary Baker Eddy. "It is paradoxical that three world famous women were neighbors and friends in this small community in Massachusetts. The fame which each one acquired was in totally unrelated fields." Lydia introduced "new methods of advertising, emancipated women from the kitchen, and established the concept that one could be healthy, though female."

Betty Friedan may copy!

Painful Thoughts

The editorial of N.C. "Pain, Panic, and Pills" in the *Saturday Review* of 31 May 1975 was eye-catching and interesting. Some excerpts worth noting are listed below:

—"Americans are probably the most pain-conscious people on the face of the earth.

—". . . we are becoming a nation of pill-grabbers and hypochondriacs, escalating the slightest ache into a searing ordeal.

—". . . most frequently it (pain) is the result of tension, stress, worry, idleness, boredom, frustration, suppressed rage, insufficient sleep, over-eating, poorly balanced diet, smoking, excessive drinking, inadequate exercise, stale air, or any other abuses encountered by the human body in modern society.

—"The unremitting barrage of advertising for pain-killing drugs, especially over television, has set the stage for a mass anxiety neurosis. Almost from the moment children are old enough to sit upright in front of a television screen, they are being indoctrinated into the hypochondriacs' clamorous and morbid world.

—"If our broadcasting stations cannot provide equal time for responses to the pain-killing advertisements, they might at least set aside a few moments each day for common-sense remarks on the subject of pain."



MATERNAL MORTALITY



CASE 3-73. This patient was a 27-year-old married, white female, Gravida 4, Para 3. Prenatal course with this pregnancy was complicated. Pre-pregnancy blood pressure ranged between 150/90 to 160/120. LMP was April 7, 1972, with an expected delivery date of January 14, 1973. Her other infants weighed over 8 lbs. She desired a tubal ligation post-partum.

PRENATAL RECORD

DATE	Aug. 17	Sept. 13	Oct. 11	Nov. 11	Nov. 18	Nov. 22	Nov. 29	Dec. 13	Dec. 21	Dec. 28	Jan. 4
WEIGHT	300+	300+	300+	298			290	295½	286	286	284
BP	140/90	130/88	140/80	160/80	150/80	156/80	124/80	150/90	150/88	160/110	160/120
ALBUMIN	0	0	0	tr	tr	tr	tr	tr	0	0	1+*
RX				Hydrochloro-thiazide 50				Hydrochlorothiazide -Bed rest			

*Hydralazine Hydrochloride—10 mg. qid

She was admitted to the hospital in labor at 5 a.m., January 14, 1973. She received 100 mg Hydroxyzine Pamoate, IM, which was repeated at 10 a.m. Her membranes ruptured spontaneously at 2 p.m. She received 100 mg Meperidine Hydrochloride with 100 mg Hydroxyzine Pamoate at 11:30 p.m., and delivered spontaneously a 9 lb. 5 oz. female at 2:05 a.m. the 15th under Penthrane anesthesia. The placenta was expressed intact spontaneously. She was afebrile the 16th, and her blood pressure normal. The tubal ligation on the 16th was performed under local anesthesia supplemented with general anesthesia when she became uncomfortable. She developed a wound infection the 18th, but was afebrile. She was treated with hot compresses and Ampicillin. The incision was drained and a culture was taken the 19th. She was doing well on the 20th, fed the baby at 5 a.m., however, 20 minutes later she was in a terminal condition, apparently gasping for breath. External cardiac massage failed to revive the patient.

The cause of death was listed as pulmonary embolism. There was no autopsy.

The Committee on Maternal Mortality classified this case as a direct obstetrical death with possible preventable factors. This patient was at high risk at the onset of her pregnancy by the fact that she weighed over 300 lbs, and already had existing hypertension. Perhaps one could say one of the preventable factors was that this patient should not have allowed herself to become pregnant because of the risk that she would undergo during pregnancy.

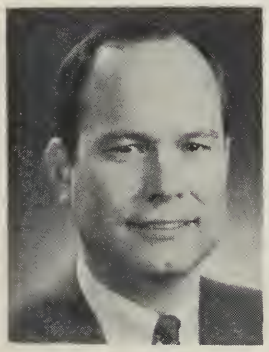
The Committee criticized the management of this patient since on the 4th of January she was known to exhibit albuminuria and was not hospitalized at that time but treated with antihypertensive agents on an out-patient basis. It is felt that she should have been followed more closely previous to this and then hospitalized, and that the use of diuretics and other antihypertensive drugs are contraindicated on an out-patient basis for such a patient as this. Comment was also made that perhaps with her obesity, a large blood pressure cuff, that is a thigh cuff should have been used to obtain her pressure for perhaps these were falsely high values because of her obesity. The cause of death is listed as pulmonary embolism. One cannot be absolutely certain of this because there was no autopsy performed. It is possible with her existing hypertension that she could have had a cerebral vascular accident with the fluid shifts that occur in the post-partum period. She may have had a sudden fluid expansion with an exacerbation of her hypertension. We cannot be certain of this for one would need an autopsy definitely to establish the cause of her death.

ORGANIZATION SECTION

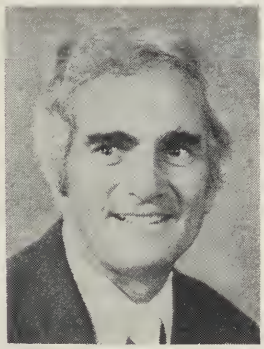
1975 KMA Annual Meeting, September 23-25 in Louisville, To Feature Outstanding Scientific Program, Speakers

Well-known authorities from across the nation will participate with Kentucky physicians to present an outstanding scientific program during the 1975 KMA Annual Meeting, September 23-25. Four general sessions, 17 specialty group meetings, two meetings of the House of Delegates, and the President's Luncheon are all important features of this year's Annual Meeting which will take place at the Ramada Inn/Bluegrass Convention Center in Louisville.

Scientific presentations for this year's general sessions will deal with "Sexual Performance," "Cancer—Detection and Therapy," "Sports Medicine," and "Gut—Issues and Answers." Dealing with "Sports Medicine" are two nationally known speakers, Sigfrid A. Muller, M.D., Rochester, Minn. and Melvin L. Thornton, M.D., San Antonio, Texas.



Doctor Muller



Doctor Thornton

Doctor Muller, a native of Panama City, Panama, is Professor of Dermatology at the Mayo Medical School. A graduate of the St. Louis University School of Medicine, Doctor Muller belongs to the American Academy of Dermatology, the Society for Investigative Dermatology and is a honorary member of the Pacific Dermatological Association. He is a Past President of the Society of Dermatologic Genetics and now serves as an editorial consultant to *Medicina Cutanea.*

Speaking on "A Critical Look at Physical Education" will be Doctor Thornton, who is Chairman of the Committee on the Pediatric Aspects of Physical Fitness, Recreation and Sports of the American Academy of Pediatrics. A graduate of the University of Texas Medical Branch, Doctor Thornton is a Clinical Professor of Pediatrics at the University of Texas Medical School at San Antonio. He also serves as Chairman of the Medical Aspects of Sports Committee of the American Medical Association.

In addition to the highlights previously mentioned, the three-day meeting will also feature the Annual Convention of the Woman's Auxiliary to KMA, the annual KEMPAC Seminar, more than 80 scientific and technical exhibits, and alumni reunions of the University of Louisville School of Medicine. A number of miscellaneous meetings will be announced at a later date.

This year's scientific program has been fully accredited once more by the AMA under Category I of the Physician's Recognition Award. Complete details of the Annual Meeting, including the scientific program, will be featured in the August issue of *The Journal.*

1975 Scientific Program Outline For Annual Meeting Released

The following preliminary scientific program for the 1975 KMA Annual Meeting has been released. The program will be held at the Bluegrass Convention Center in Louisville.

Each half-day session of the three-day program will feature a 30-minute intermission so physicians may visit the scientific and technical exhibits.

TUESDAY, SEPTEMBER 23—Morning Session

THEME: "Sexual Performance"

Opening Ceremonies

"Care of the Rape Victim in the Emergency Department"—John Rogers, M.D., Orchard Lake, Mich.

"Sexual Performance After Urological Operations"—Raymond Bunge, M.D., Iowa City, Iowa

"Sexual Performance: Fact and Fiction"—Bernard Cinberg, M.D., New York, N.Y.

"Resuscitation and Management of the Dying Patient"—Terring Heironimus, III, M.D., Charlottesville, Va.

"Bad Sores and Other Mortifications"—M. J. Jurkiewicz, M.D., Atlanta, Ga.

"Abnormalities of the Growing Colon"—William Davis, M.D., Denver, Colo.

Nine of the 17 participating specialty groups will meet simultaneously at 1:30 p.m. No general scientific session will be held at that time.

WEDNESDAY, SEPTEMBER 24—Morning Session

THEME: "Cancer—Detection and Therapy"

"A Case for Early Diagnosis of Lung Cancer"—Tom DeMeester, M.D., Chicago, Ill.

"Angiosarcoma of the Liver"—Maurice Johnson, M.D., Akron, Ohio

"The Role of Immunology in the Early Detection of Cancer"—Loren Humphrey, M.D., Kansas City, Kan.

"Detection of Pelvic Malignancy"—Robert Rogers, M.D., Indianapolis, Ind.

"Acute Leukemia of Children, Current Progress and Future Needs"—Alvin Mauer, M.D., Memphis, Tenn.

Afternoon Session

THEME: "Sports Medicine"

"Management of Injuries to Athletes"—Don O'Donoghue, M.D., Oklahoma City, Okla.

"Otolaryngologic Sports Injuries"—Myron Lockey, M.D., Jackson, Miss.

"Dermatologic Problems in Athletics"—Sigfrid Muller, M.D., Rochester, Minn.

"A Critical Look at Physical Education"—Melvin Thornton, M.D., San Antonio, Tex.

"Cranial and Spinal Aspects of Sports Injuries"—Christopher Shields, M.D., Louisville

THURSDAY, SEPTEMBER 25—Morning Session

THEME: "Gut—Issues and Answers

"The Diagnosis and Treatment of Common Intestinal Parasites—Current Concepts"—Joseph Burke, M.D., Lexington

"The Liver and the Pill"—E. Truman Mays, M.D., Lexington

"The Liver—Problems and Solutions"—John Galambos, M.D., Atlanta, Ga.

"Etiology of Gastrointestinal Bleeding"—G. Dewey Dunn, M.D., Nashville, Tenn.

"Psychosomatic Aspects of GI Complaints"—Barry Blackwell, M.D., Cincinnati, Ohio

"Therapeutic and Diagnostic Colonoscopy: Advantages and Limitations"—Carl Knutson, M.D., Louisville

Eight specialty groups will meet this afternoon at 1:30 p.m. There is no general session scheduled.

1975 Emergency Care Seminar Has Record Registration

A record number of physicians, nurses, emergency medical technicians and other health professionals attended the Fifth Annual Emergency Health Care Seminar held on June 3 and 4. Over 430 registrants participated in the two-day event in Louisville.

One full day on the program was devoted, at the request of the KMA House of Delegates, to basic life support and cardiopulmonary resuscitation. Demonstrations were featured on tracheal intubation using live subjects, cardiac compression with EMT instructors and centrovenous catheters and pressures.

Luncheon speakers for the two days were J. Ed McConnell, President of Blue Cross, Blue Shield and Delta Dental of Kentucky, and Barry H. Rumack, M.D., Director of the Rocky Mountain Poison Center in Denver. Doctor Rumack spoke on "Management of Acute Poisoning."

Other program participants included faculty members from the University of Louisville and University of Kentucky medical schools, as well as physicians in private practice. Sponsors of the annual program were KMA, the Kentucky Hospital Association, the Kentucky Nurses Association, and the Kentucky Chapter, American College of Emergency Physicians.

New Clinical Associate Program At U.K. Graduates Ten

Ten students recently completed the new Clinical Associate Program at the University of Kentucky Medical Center. The two-year program is designed to train the Assistant to the Primary Care Physician.

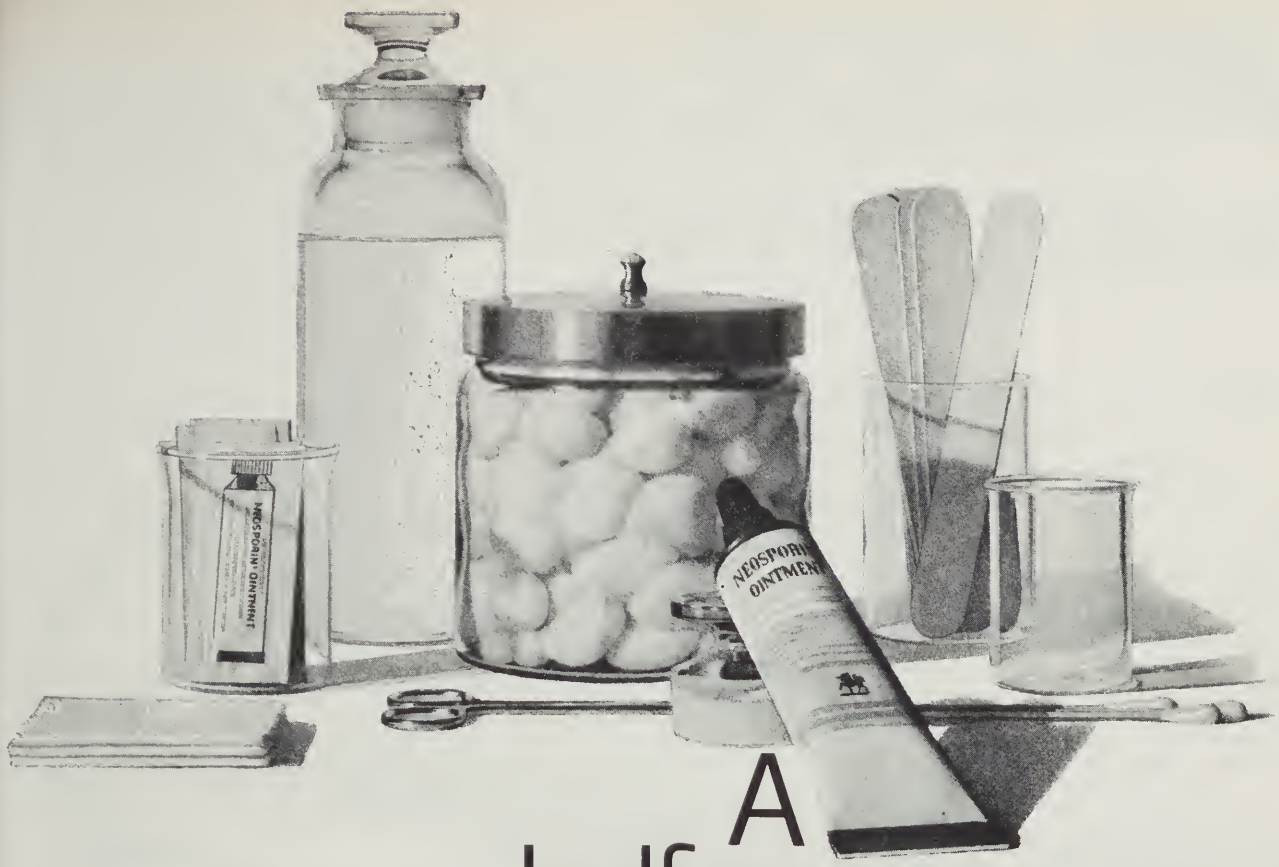
The students, eight of whom already had a college degree, completed 12 months of formal classes and 10 months of clinical rotations. The classes included microbiology, anatomy, physiology, pathology, clinical medicine, medical ethics, physical diagnosis, laboratory medicine, growth and development and interviewing. Clinical rotations were in the fields of pediatrics, surgery, family medicine, dermatology, obstetrics and gynecology, electrocardiography and radiology, and included a three-month preceptorship. Training was also provided for obtaining medical histories, doing physical exams and assisting with routine patient care activities.

The staff of the Clinical Associate Program requests that suggestions, comments or questions by practicing physicians in the state who have an interest in or concerns regarding this new health care role be directed to: Earl E. Vastbinder, M.D., Director, Clinical Associate Program, University of Kentucky Medical Center, 805 South Limestone, Lexington, Kentucky 40506.

Preliminary Injunction Granted In AMA Lawsuit Against HEW

A preliminary injunction was granted on May 27 by U.S. District Judge Julius Hoffman in AMA's lawsuit to prevent HEW from enforcing or implementing the utilization review regulations covering Medicare and Medicaid patients.

Judge Hoffman said the ruling was made on the basis that patients might be injured by implementation of the regulations. Testimony by Frank J. Jirka, M.D., a member of the AMA Board of Trustees, was cited by Judge Hoffman, who also said there is evidence to suggest that the UR regulations violate a portion of the Social Security Act which forbids federal supervision or control over the practice of medicine.



A half-ounce of prevention

Use it to prevent a topical infection. Or to treat one that's already started. In either case, it's good medicine. Whether for lacerations, burns, open wounds, IV catheter or surgical aftercare. Neosporin® Ointment provides broad antibacterial coverage against common susceptible pathogens. And since it contains three antibiotics that are rarely used systemically, the risk of sensitization is reduced. Neosporin Ointment. A half-ounce of prevention. Also available in a full ounce of prevention and in convenient foil packets.

Neosporin Ointment carried on Apollo and Skylab missions.

Neosporin® Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs.
In tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically*, used as an adjunct to appropriate systemic therapy for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

Wellcome / **Burroughs Wellcome Co.**
Research Triangle Park
North Carolina 27709

DYAZIDE®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

makes sense



For long-term control of hypertension*

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* WARNING
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Indications: *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

'DYAZIDE'

Just once or twice daily for maintenance. Hydrochlorothiazide to help keep blood pressure down and triamterene to help keep potassium levels up.

In Memoriam

EDWARD J. FADELL, M.D.
Louisville
1921-1975

Edward J. Fadell, M.D., Louisville, died on May 17 at the age of 54. A pathologist, Doctor Fadell was the Chief of Staff at Methodist Evangelical Hospital. A 1948 graduate of St. Louis University School of Medicine, Doctor Fadell was an active member of the Jefferson County Medical Society and the Kentucky Medical Association.

JOSEPH J. WYNN, M.D.
Louisville
1886-1975

Joseph J. Wynn, M.D., 88, died in Louisville on June 12. A retired ophthalmologist, Doctor Wynn had practiced in Louisville for 58 years. A 1908 graduate of Hahnemann Medical College, Doctor Wynn was a fellow of the American College of Surgeons. He was a member of the Jefferson County Medical Society, as well as the Kentucky and American medical associations.

NEWS ITEMS

The Kentucky Division, American Trauma Society was recently incorporated and will begin efforts to inform the public of the problems of trauma, which is the fourth leading cause of all deaths. The Kentucky Division, which is a non-profit voluntary health organization, will also join with the State Department of Human Resources in implementing an emergency medical service system in Kentucky. For further information contact: Kimball I. Maull, M.D., Department of Surgery, University of Kentucky Medical Center, Lexington, Kentucky 40506.

Mrs. Marie Thomas of Corbin was recently installed as the President of the Kentucky Society of the American Association of Medical Assistants at the Society's Annual Convention held in May in Lexington. The National Convention of AAMA will be held in October in Louisville.

Jacqueline A. Noonan, M.D., Lexington, was recently elected President of the Kentucky Heart Association. Doctor Noonan succeeds H. B. McWhorter, M.D., Ashland. A Louisville internist, Walter S. Coe, M.D., was named 1st Vice-President.

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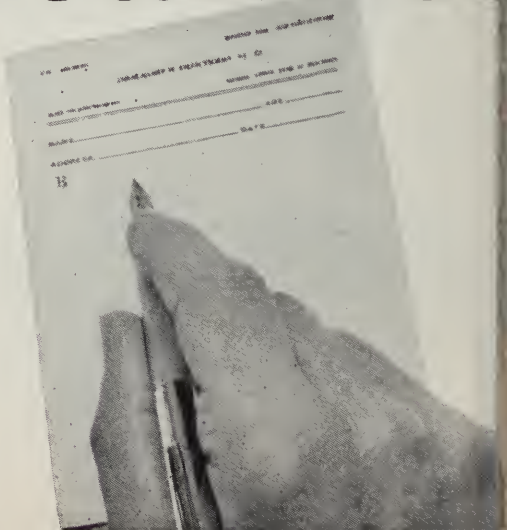
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Bioequivalence



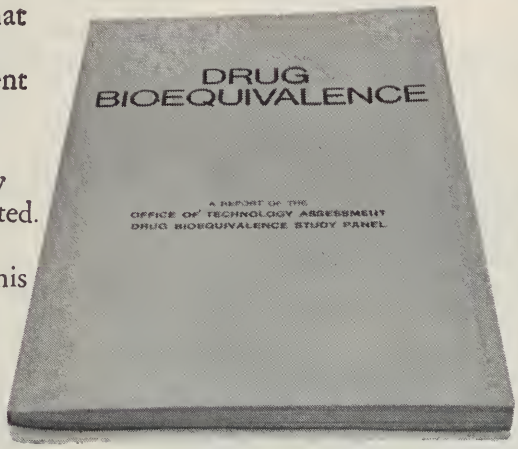
the weight of scientific opinion:

If the pharmacist substituted a chemically equivalent drug for the one you have specified for your patient—could you be certain of that product's safety and effectiveness simply because the chemical content was the same?

Definitely not, unless bioequivalence tests and other quality assurance checks had been conducted. The pharmaceutical industry and many scientists have maintained this position for years, but others have questioned it. Now the Office of Technology Assessment of the Congress of the United States has reported on the issue in its Drug Bioequivalence Study.*

Here are a few definitive statements in the O.T.A. report:

"...the problem of bioinequivalency in chemically equivalent products is a real one. Since the studies in which lack of bioequivalence was demonstrated involved marketed products that met current compendial standards, these documented instances constitute unequivocal evidence that neither the present standards for testing the finished product nor the specifications for materials, manufacturing process, and controls are adequate to ensure that ostensibly equivalent drug products are, in fact, equivalent in bioavailability.



"While these therapeutic failures resulting from problems of bioavailability were recognized and well documented, it is entirely possible that other therapeutic failures and/or instances of toxicity that had a similar basis have escaped attention."

The Pharmaceutical Manufacturers Association supports federal legislative amendments that would require manufacturers of duplicate prescription pharmaceutical products, subject to new drug procedures, to document:

(a) chemical equivalence; and

(b) biological equivalence, where bioavailability test methods have been validated as a reliable means of assuring clinical equivalence; **or**

(c) where such validation is not possible, therapeutic equivalence.

In addition, the PMA supports federal legislation that would require certification of all manufacturers of prescription products before they could start in business, annual inspections and certification thereafter, and strict adherence to FDA regulations on good manufacturing practices.

The overall quality of the United States drug supply is excellent. But only a total quality assurance program, envisaged in these and other policy positions adopted by the PMA Board of Directors in 1974, can bring about acceptable levels of performance by all prescription drug manufacturers and thereby assure the integrity of your prescription...

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

*Copies of the complete report on Drug Bioequivalence may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

protecting the integrity of your prescription



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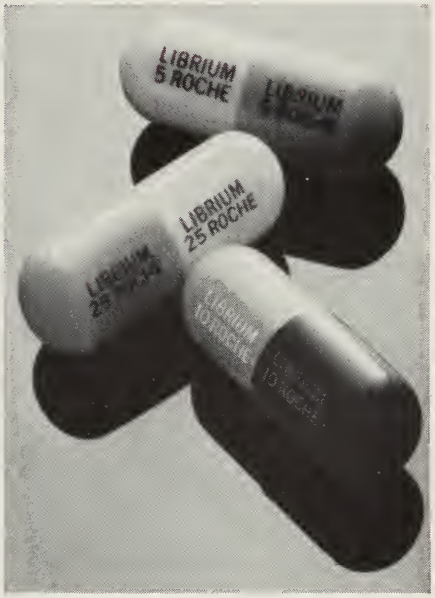
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions:

ORAL: In the elderly and debilitated and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six.

INJECTABLE: Keep patients under observation, preferably in bed, up to three hours after initial injection; forbid ambulatory patients to operate vehicle following injection; do not administer to patients in shock or comatose states; use reduced dosage (usually 25 to 50 mg) for the elderly or debilitated and for children age twelve or older.

ORAL AND INJECTABLE: Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating compounds such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual



precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

With the injectable form, isolated instances of hypotension, tachycardia and blurred vision have been reported; also hypotension associated with spinal anesthesia, and pain following I.M. injection.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral: Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

For Parenteral Administration: Should be individualized according to diagnosis and response. While 300 mg may be given during a 6-hour period, do not exceed this dose in any 24-hour period. To control acute conditions rapidly, the usual initial adult dose is 50 to 100 mg I.M. or I.V. Subsequent treatment, if necessary, may be given orally. (See Precautions.)

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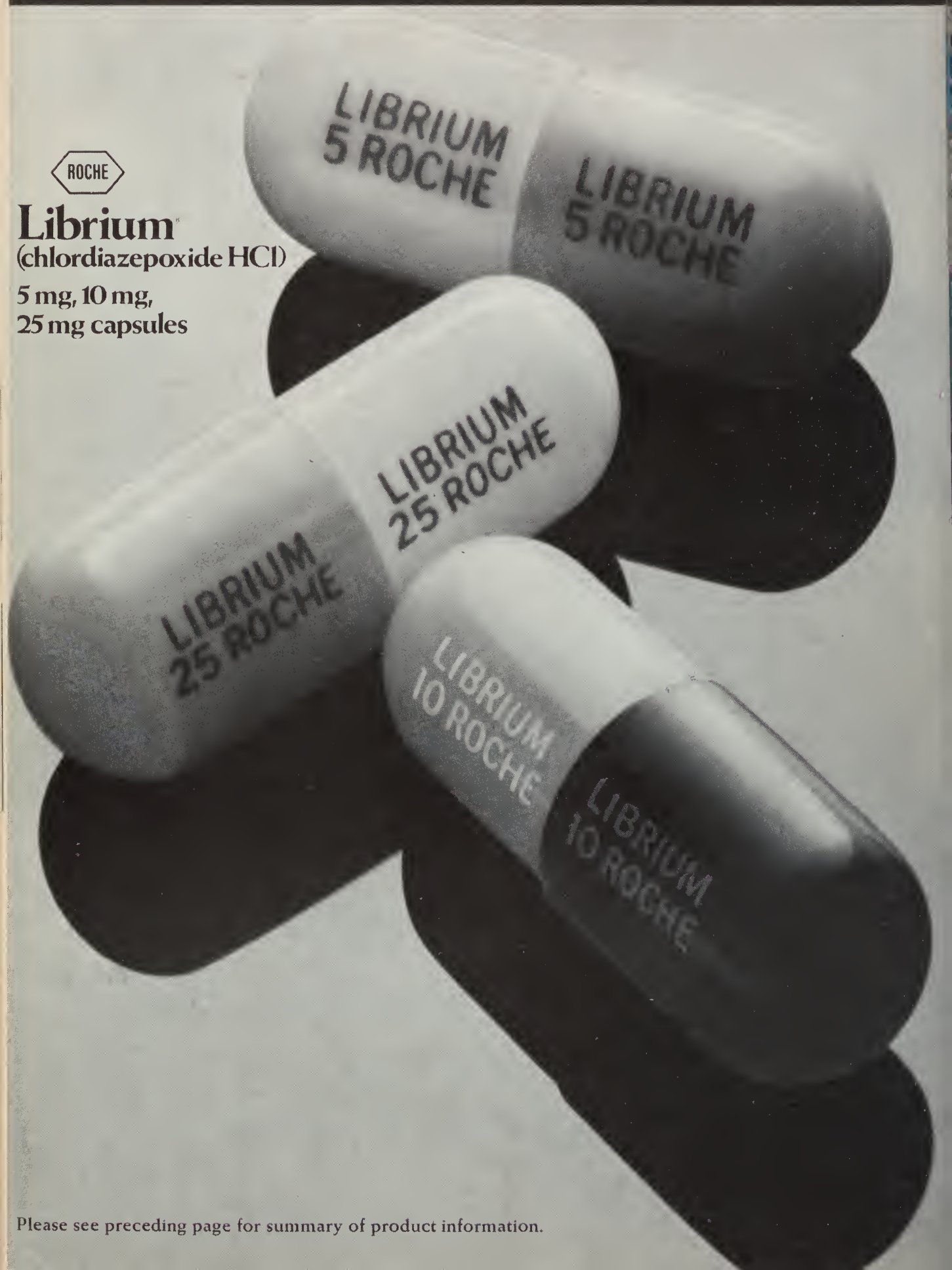
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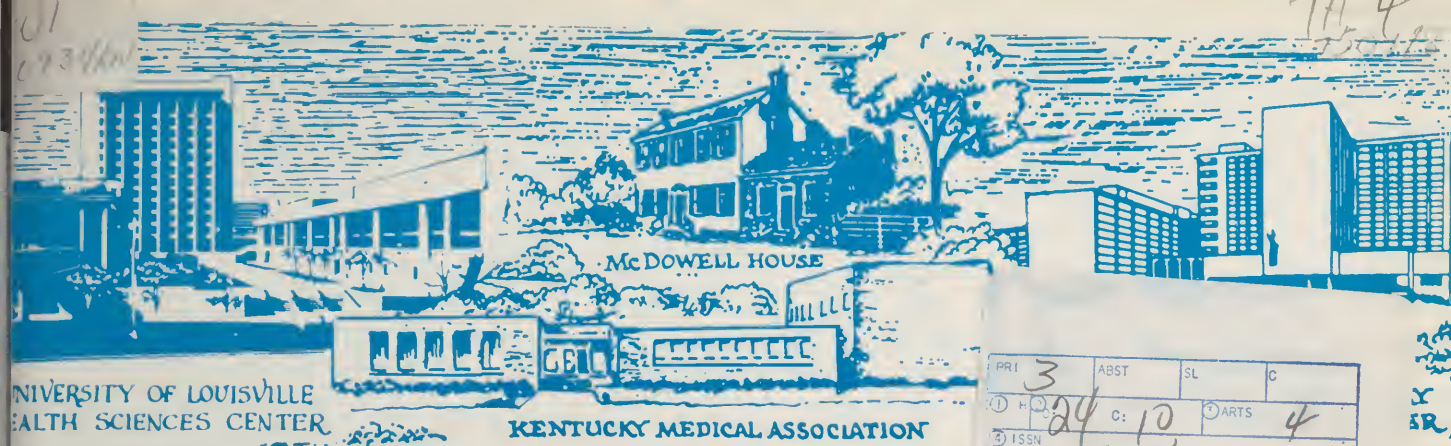
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Please see preceding page for summary of product information.



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ANNUAL MEETING ISSUE

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1975 KMA ANNUAL MEETING
September 23-25
Ramada Inn/Bluegrass Convention Center
Louisville

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



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in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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MESSAGE FROM THE PRESIDENT



Another year is almost over for KMA and I want to thank all of the Trustees, staff and individual members for their fine cooperation and help during my year as Chairman of the Board. It has been a trying year in many ways but one in which much has been accomplished. Our biggest problem, requiring the most time and effort, has been the Liability Insurance Crisis. It isn't over yet but we are making progress and will hopefully have legislation passed in January to reduce the problems for all of us. In the meantime, all physicians in the state are able to obtain insurance, although the premium is still too high for some.

Medical problems, and solutions to them, continue to mount every year and this requires additional organizations, committee meetings, Board meetings, Executive Committee meetings and staff work. All of this is designed to keep you, the practicing and teaching physician, informed so that you may make policy for KMA and participate in solving problems. That is the purpose of the annual House of Delegates Meeting which takes place next month. Come informed about KMA and AMA affairs and participate in the Reference Committee deliberations so that your voice can be heard. Send delegates who will speak out and listen and be helpful.

To do all things needed to help you here, in Frankfort, in Washington and in your office requires money and that is the reason for the proposed dues increase. KMA money is not wasted. The committee meetings are necessary. We cannot do our work individually. We must maintain a strong organization to continue in private enterprise. Don't let the dollar sign prevent you from belonging to a progressive medical society. Give and participate and you will agree that your money is well spent.

Make a special effort to attend the Convention, see the exhibits, hear the discussion periods, become better informed and act wisely in all the deliberations of the business sessions and we will have a better KMA.

See you next month.

PAUL J. PARKS, M.D., CHAIRMAN
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This is the third in a series of articles written at the request of KMA President, Hoyt D. Gardner, M.D.

A Link in the Chain

auxiliary

COME, ONE AND ALL!
ON SEPTEMBER 22, 23, 24
NEWS OF THE YEAR PAST—
VIEWS OF THE YEAR TO COME!
ELECT OUR NEW OFFICERS, 1975
NAME THE NOMINATING COMMITTEE.
TAKE TIME TO ENJOY OLD FRIENDS,
INTRODUCE YOURSELF TO NEW ONES—
ON TUESDAY, WE WILL LUNCH AT BIG SPRING,
NOW, MAKE PLANS TO JOIN US!

The Ramada Inn, Hurstbourne Lane, Louisville, will be the location of our 53rd Annual Convention. **September 22,** Monday afternoon, we will hold our pre-Convention Board meeting. **September 23,** Tuesday morning, our House of Delegates will meet; and among other business, we will elect the officers for the coming year as well as consider the proposed revisions of our by-laws. **September 24,** Wednesday, our 1975-76 President, Mrs. Wally Montgomery, will conduct a post-Convention Board meeting in the morning, with a workshop-orientation program in the afternoon, during which she will outline the plans she hopes to implement during the coming year.

Both Tuesday and Wednesday morning, there will be poolside continental breakfasts served, prior to the meetings. Also, at Tuesday noon, we will go to Big Spring Country Club, for a luncheon honoring our past presidents. Mrs. Max Horine will entertain us following the luncheon, with a talk on "Women in the White House."

While the meeting is primarily designed to accomplish much necessary business, it is our hope that it will also serve as a time of relaxation, affording MD's wives the opportunity to better know and enjoy each others' company. Please urge your wife to join us—whether she is a member of WA-KMA or not!

PLEASE VISIT OUR HOSPITALITY SUITE, POOLSIDE, ROOM NO. 1132.
Coffee, Tea, Towels—Sign up for tennis and golf!

Mrs. Richard B. McElvein, President
Woman's Auxiliary to KMA

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

SEPTEMBER

17 "Drug Interactions,"** Health Sciences Center, University of Louisville, Louisville

21 Alumni Day,** Health Sciences Center, University of Louisville, Louisville

22 1975 John I. Perlstein Memorial Lecture, "Treatment of Acute Lymphocytic Leukemia in Children," UL Health Sciences Center, Louisville

23-25 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

26-28 "Scientific Foundations for Clinical Practice,"* Fee: $45, UK Medical Center, Lexington

OCTOBER

3-4 Fall Scientific Conference, Kentucky Thoracic Society, Sheraton Inn-South, Lexington

15-16 "Newer Concepts in Allergy and Immunology,"** Health Sciences Center, University of Louisville, Louisville

29 "Thromboembolis Disease—Investigation and Management,"** St. Anthony Hospital, Louisville

30-Nov. 1 11th Annual Bronson Course in Diagnostic Ophthalmic Ultrasound,** Health Sciences Center, University of Louisville, Louisville

NOVEMBER

3-4 "Endometrial Carcinoma and Its Treatment," American Cancer Society, Kentucky Division. Twenty-five outstanding national and international speakers. Galt House, Louisville. For registration write: Laman A. Gray, Sr., M.D., Children's Foundation Building, 601 South Floyd Street, Louisville 40202.

8-9 KAFP Seminar, Jenny Wiley State Park, Prestonsburg

13-14 11th Annual Symposium on Central Nervous System in the Newborn, Health Sciences Center, University of Louisville, Louisville

IN SURROUNDING STATES

OCTOBER

6-9 American Academy of Family Physicians, Palmer House, Chicago

7-12 Society for Clinical & Experimental Hypnosis Annual Scientific Program & Workshops, Center for Continuing Education, University of Chicago

13-17 Clinical Congress of the American College of Surgeons, Fairmont Hotel, San Francisco

13-17 "Preventive Internal Medicine," American College of Physicians Postgraduate Course, University of Tennessee Department of Medicine, Memphis

20-21 Tennessee Valley Medical Assembly, Read House, Chattanooga

24-25 Tennessee/Kentucky Regional Meeting, American College of Physicians, Hyatt Regency, Nashville. For information: Gerald Plitman, M.D., 180 Waring Road, Memphis, Tennessee 38117.

26-30 Annual Scientific Assembly, American College of Chest Physicians, Anaheim Convention Center, Anaheim

NOVEMBER

3-7 "Current Concepts in Pediatric Radiology," sponsored by Duke University Medical Center; Pinehurst Hotel, Pinehurst, N.C.

13-15 "The Critically Injured Patient: Emergency Surgical and Medical Care," sponsored by the American College of Surgeons and Case Western Reserve Medical School; Marriott Inn, Cleveland, O.

16-19 Annual Scientific Meeting, Southern Medical Association, Miami Beach, Fla.

29-Dec. 4 AMA Clinical Convention, Honolulu

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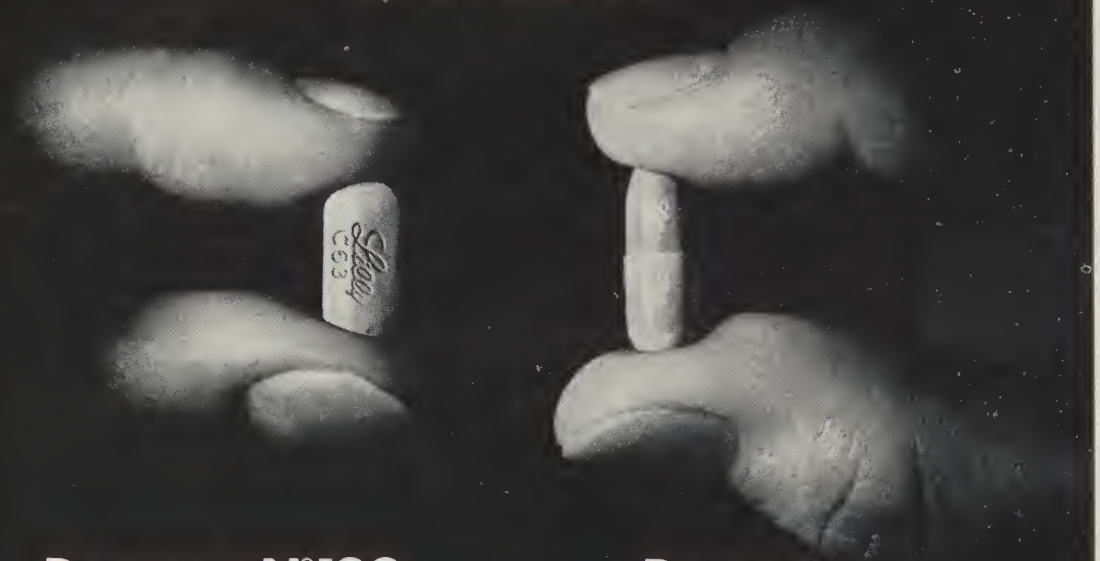
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Postpartum Vaccination of Rubella-Susceptible Women

W. GRADY STUMBO, M.D., ROGER D. AKERS, M.D., GLENNA DAVENPORT, R.N., SHEILA ADAMS, R.N., JUDY CATRON, R.N. AND JANET STALLMEYER, R.N.*

Hindman, Kentucky

This study describes a serological survey of pregnant women with the identification and vaccination of sero-susceptible women in the immediate postpartum period.

THE most important reason for rubella immunization is to prevent the fetal rubella syndrome. The most important persons at risk are women of childbearing age. The risks from immunizing adult women have retarded the development of a routine rubella screening program for adults. For several reasons, many adult women of childbearing age are sero-negative or have low antibody titers to rubella. There is now a need for selective immunization of rubella susceptible women.

Material and Method

The hemagglutination-inhibition (H-I) antibody titer was performed on blood collected from pregnant women who were followed in the prenatal outpatient clinic between the months of August, 1973, and March, 1974. The collected blood was stored as whole blood and mailed weekly to the Division of Laboratory Services, Kentucky State Department of Health, where (H-I) antibody titers were determined. All sero-negative or low titer susceptible women without contraindication received an injection of HPV-77 strain of attenuated rubella virus by Merck Sharp & Dohme within 72 hours after delivery. All immunized women were provided with birth control of their choice. Post-vaccination blood was collected six weeks to three months after the immunization date. The post-vaccination blood was collected and handled in the same manner as the initial blood samples.

Results

During the screening period 69 patients were screened and 21 (30.4%) were found to be sero-negative or to have low antibody titers to rubella. Twenty patients were vaccinated and of these, 18 (90%) were followed and had postpartum blood samples collected. Table 1 shows the H-I tier ranges and the number of

Table 1

PRE-DELIVERY RUBELLA TITERS

Antibody Titers	# of Patients
Negative	2
1:8	7
1:16	12
1:32	10
1:64	14
1:128	8
1:256	8
>1:512	8
TOTAL	69

*Members of a primary care practice medical team in East Kentucky Health Service Clinic at Hindman.
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patients falling into each range. For the purpose of the study, titers less than 1:20 were considered susceptible. From the table it is noted that 21 women fall into these ranges. Table 2 reveals the twenty women who were immunized and the antibody response of the 18 patients who had follow-up antibody titers completed. All immunized patients had an increase in antibody titers except one. No explanation for this has been discovered.

There was no morbidity during the study period and patient acceptance of the testing was good.

Discussion

Susceptible low titer or sero-negative women of childbearing age represents the population that most needs protection against rubella exposure.

Antibody titers to rubella have been studied in unvaccinated postpubertal women. The results have revealed 10% to 20% of these women to be sero-negative.[1,2] Additional studies in pregnant and postpartum women have shown that 10% to 14% lack protective antibodies.[1]

In the past the problem of identifying the antibody titers and the risk of pregnancy or becoming pregnant has retarded the use of the rubella vaccine in the postpubertal female. Postpubertal females, if susceptible, should be vaccinated if no contraindication are present.[3] It has been proposed that all nonpregnant, postpubertal women who have a (H-I) titer of less than 1:20 should receive rubella vaccine.[3-5]

A low H-I titer represents (assuming no technical errors) exposure to the rubella virus that has not been maintained. This exposure can result from contracting the disease naturally or by receiving the virus through an immunization program.

Vaccines produced with three strains of rubella virus have been marketed:[4] HPV-77 (by Merck Sharp & Dohme, Parke-Davis and Philips Roxane), RA-7713 (by Burroughs-Wellcome), and the Cendehill vaccine (by Smith, Kline and French). Each of these vaccines can produce some of the signs and symptoms of clinical rubella. In adults arthralgia appears to be the most common cause of morbidity following rubella vaccination.[6] The postpartum period is an opportune time for immunization of sero-negative women. All women receiving the immunization must be provided with a contraceptive method for at least three months.[1]

Several studies have revealed that the infection of a susceptible adult by an immunized child or adult is most unlikely.[7] Thus the immunized postpartum woman is no threat to other susceptible females.

Mass immunization of children should reduce cross-infection to women of childbearing age, and, if continued for years, should produce an immune population. Some authorities feel that susceptible women in the childbearing age should be the primary target of immunization programs and have suggested that all women be screened for rubella antibodies and that susceptible women be vaccinated.[2]

The postpartum immunization of adult women appears safe and without significant morbidity. The rubella titers observed in the 69 patients examined reveals a high susceptibility rate (30.4%) in this rural population. In the study group, 94% of the immunized women had an antibody response to the given strain of rubella vaccine.

For reasons stated earlier, rubella titers may not be maintained at sufficient levels for protection in many women and that these childbearing women represent the group at highest risk. The authors have concluded that adult women should be screened for the presence of

Table 2

RUBELLA TITERS POST-VACCINATION OF SUSCEPTIBLE WOMEN WHO RECEIVED IMMUNIZATION

Pre-Vaccination Titers	# of Patients	No Followup Specimen	Negative	One Dilution	2 or Greater Dilution
Negative	2			2	
1:8	6		1	4	1
1:16	12	2		7	3

rubella antibodies and that susceptible women be given an immunization with a strain of the rubella virus and contraception in the postpartum period.

Summary

The opportune time for rubella antibody screening appears to be in the prenatal clinic. The determination of sero-negative women and their immunization in the postpartum period appears safe and is associated with a low morbidity.

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Manuscript Memos

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In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

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Spectacle Lens Associated Eye Injuries in Louisville – 1960-1974†

WILLIAM E. MOORE, B.S., AND ARTHUR H. KEENEY, M.D.*

Louisville, Kentucky

Louisville hospital records of 1,057 patients sustaining eye injuries were examined. Twenty-five cases involved injury due to spectacle glass. Approximately 75% of these injuries could be prevented by use of impact resistant lenses of plastic or tempered glass.

SPECTACLES and sunglasses are so ubiquitous as to be rarely considered a hazard. Indeed, in industry they have been progressively used for over a century to provide eye protection. FDA regulations in effect since 1972 specifying minimal impact-resistance performance for all ophthalmic lenses have broadened the distribution of mechanical protection from lenses. In spite of industrial safety prototype and recent voluntary, as well as governmental standards, eye injuries associated with spectacles are still encountered.[1] This is an experiential report of 1,057 injured patients in the Louisville metropolitan area during 1960-74. (Table 1)

The search of medical records at 10 local hospitals concentrated on the years 1964 through 1974, although some records were available through 1960 at two hospitals. Suburban Hospital which opened in 1972, was also included. All admissions coded under E-914:[2] Foreign Body Accidentally Entering Eye and Adnexa, and #870:[2] Open Wound of Eye and Orbit, were retrieved. From 1,057 such records were selected those which identified glass as a missile or foreign body. Among these, 25 were specified as spectacle glass. These steps almost certainly understate the actual incidence and prevalence of eye injuries of this type, e.g., dozens of cases were excluded because the source of glass could not be identified. Added to this are possible medical record miscoding plus non-hospitalized cases of less serious degree.

Concern with spectacle glass injury has not only been a long-standing source of apprehension to mothers of young children, it has a published record of local medical analysis at least from 1907.[3-5]

These data do not indicate local rate or incidence of injuries, nor can they be projected to national significance.[6] Sampling through 119 hospital emergency rooms, however, is available in the National Electronic Injury Surveillance System (NEISS) currently maintained by the U. S. Consumer Products Safety Commission, Washington, D. C., 20207. This system supplies data by Touchtone computer on emergency room patients in cooperating hospitals. Product-related injuries are divided into 18 categories. The most recent report is for F.Y. 1974 (July 1, 1973-June 30, 1974). During this year 317,066 patients reported to the sampling hospital emergency rooms with product-related injuries. Contact lenses (code #1624) accounted for 634 patients, eye glasses (code #1606) accounted for 277 patients, and sunglasses or fashion eyewear (code #1607) accounted for 20 injuries.

"Mean severity" is quantitated for the product by dividing the total number of injured patients into the sum of weighted, mathematically derived severity values for that group. "Mean severity" was only 13 for the contact lens patients but more than double this in the spectacle related injuries, listed as 27 or 28. For comparison in this sampling period, the largest numbers of injuries were related to stairs and ramps (22,935), next were bicycles (20,188) and third were unspecified glass fragments (10,092). "Mean severity" ranges

†*This work was supported in part through the assistance of the National Society for the Prevention of Blindness and Research to Prevent Blindness, Inc.*
**Department of Ophthalmology, University of Louisville School of Medicine, Louisville*
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up to a few hundred points in gas explosions or power take-off entanglements.

Analysis of Spectacle Lens Injuries

Within the above qualifications, useful information may be extracted from available data. (Table 2) The 25 spectacle-mediated injuries constituted nearly three per cent of the coded injuries. Average hospitalization was 6.7 days, and the total was 167 days. Year-to-year incidence of such injuries varied from zero (1971) to six (1973). The general trend since 1964 has been an **increase** in incidence of such injuries. The 1973 high is unrelated to introduction of Federal impact standards in 1972, since the standards affect only new lenses rather than lenses in use.

The age range was eight to 67 years with 28 per cent of patients under 22 years of age, 58 per cent age 22 to 50, and 24 per cent age 50 or older. Males constituted 94 per cent of the group. Residual visual effects ranged from no-loss to enucleation of the eye. Thus far 23 surgical operations have been required, and three eyes (12 per cent) lost.

Most common causes of injury included auto crashes (four) and sporting balls (five). Only one case involved injury due to a nail—a significant finding in contrast to more than 100 nail-related eye injures in those not wearing protective spectacles. Two cases involved on-the-job industrial accidents, both with heavy objects thrown from large machines, but producing relatively minimal eye trauma. Our Louisville part of the Blue Grass state had two horse-kick eye injuries. Analysis of the mechanism of injury and site of ocular trauma suggests that 19 of these 25 could have been avoided by the use of available safety lens materials.

Conclusion

These 25 cases illustrate that spectacle lens injuries are a potential hazard for all spectacle wearers. There is no totally "shatter-proof" or "unbreakable" spectacle lens. Progressively greater impact resistance, however, is afforded by heat-tempered glass, chemically-tempered glass, or plastic resin lenses. Materials of this type are easily available and could have prevented about 75 per cent of these injuries or reduced their severity. They should be utilized in all spectacle and sunglass prescriptions, but particularly for younger males and one-eyed individuals.

Acknowledgements

We wish to thank the following members of the School of Medicine for their assistance in providing case materials and follow-up information for this study:

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Table 1

SPECTACLE GLASS INJURIES IN LOUISVILLE AREA 1960-74

Hospital	Hospitalizations for Ocular F.B.'s or Wounds	Identified Spectacle Glass Cases	%	Hospital Days
Methodist	79	1	1.26	6
Baptist	45	3	6.67	19
VA	42	2	4.76	9
Sts. Mary & Elizabeth	54	1	1.85	5
Norton-Children's	79	1	1.26	10
St. Anthony	45	1	2.22	3
L.G.H.	41	3	7.32	29
Jewish	230	7	3.04	49
St. Joseph's	405	6	1.48	37
Suburban (opened in 1972)	37	0	0.00	0
Total	1057	25	2.36	167

Average stay = 6.7 days.

Table 2

CASE HISTORIES OF SPECTACLE GLASS INJURIES IN LOUISVILLE AREA 1960-74

Case No. Initials Hospital	Age & Sex	Mechanism of Injury	Principal Damage	Treatment & Operations	Current Vision	Days in Hospital & Year
1 R.B. Baptist	9 Male	Baseball	Transcorneal penetrating laceration with iris prolapse.	Repair of laceration.	O.D.20/30 O.S.20/25	8 1964
2 A.B. Baptist	65 Male	Chain from manure spreader	Multiple lacerations of upper & lower lids O.D.	Repair of lacerations under general anesthesia.	O.D. — O.S. —	4 1966
3 S.T. Baptist	67 Male	Kicked by horse	Multiple fractures, inferior & lateral orbit rim, maxilla disorganized eye. O.S.	Enucleation of left eye. Surgical repair of multiple fractures.	O.D. — O.S. None	7 1967
4 J.B. Jewish	61 Male	Wood thrown from industrial machine	Laceration of cornea O.S. No loss of A.C.	Conservative therapy with complete bed rest. No surgery.	O.D. 20/20 O.S. 20/25	5 1967
5 H.G. Jewish	40 Male	Softball	Upper lid and corneoscleral laceration, O.S.	Surgical repair of lacerations.	O.D. — O.S. —	6 1972
6 M.H. Jewish	26 Male	Shearing machine blade broke	Scleral laceration with uveal prolapse; multiple glass F.B.'s embedded in cornea O.D.	Surgical repair of laceration plus removal of glass of F.B.'s.	O.D.20/60 O.S.20/20	8 1973
7 J.M. Jewish	41 Male	Hit by piece concrete	Multiple lacerations and abrasions scleral perforation, retinal tear, O.D.	Sutured lacerations; repair of retinal tear via transconjunctival cryopexy.	O.D. 20/50 O.S. 20/20	8 1970
8 A.O. Jewish	34 Fem.	Auto crash	Laceration of right upper lid with extensive tissue loss. Globe not involved.	Removal of multiple glass F.B.'s and repair of right upper lid.	O.D. (Vision O.S. unaffected)	2 1973
9 R.S. Jewish	21 Male	Baseball Spectacle frame broken	Superficial corneal lacerations, contusion, and hyphema. O.D.	Enzymes plus Atropine. No surgery required.	O.D. 20/30 O.S.	3 1966
10 D.G.T. Jewish	41 Male	Shotgun blast	Contusions O.S. with corneo scleral abrasion. Retained glass and metallic F.B. Prolapse intraocular contents, O.D.	Repair of perforated globe O.D. with excision uveal tissues and reformation of A.C. Enucleation of right eye.	O.D. Removed O.S. 20/40	17 1969
11 C.T.A. L.G.H.	23 Male	Gunshot	Powdered glass embedded in cornea, sclera and conjunctiva, O.S.	Removal of glass particles under general anesthesia.	O.D. 20/70 O.S. 20/100	8 1966
12 H.G. L.G.H.	18 Male	Auto crash	Corneal laceration with iris prolapse; traumatic cataract.	Repair lacerated cornea; sector iridectomy. Scheie aspiration and Behren's discission of cataract O.D.	O.D. 20/50-3 O.S. 20/20	16 1967
13 R.R. L.G.H.	14 Male	Blow to face	Glass F.B.'s embedded in cornea O.D.	Removed under anesthesia	O.D. 20/20 O.S. 20/21	5 1960
14 J.F.J. Methodist	53 Male	Hit by wood while using saw	Corneal abrasions; glass F.B.'s; multiple lid lacerations. O.D.	Emergency Room treatment plus surgery for removal of glass F.B.'s.	O.D. 20/25 O.S. 20/20	6 1970

Case No. Initials Hospital	Age & Sex	Mechanism of Injury	Principal Damage	Treatment & Operations	Current Vision	Days in Hospital & Year
15 R.R.D. Norton-Childrens	15 Male	Golf Ball	Gaping corneal laceration O.D. No retained foreign body.	Repair of corneal laceration under general anesthesia.	O.D. 20/200 O.S. 20/20	10 1974
16 A.P.D. St. Anthony's	14 Male	Struck in face	1" laceration of upper eyelid; Multiple corneal abrasions O.S. Inability to move L. eye upward.	Exploratory surgery plus lid repair.	O.D. — O.S. —	3 1968
17 E.C. St. Jo's	55 Male	Badminton Racket	Corneal Abrasion; embedded glass particles in right cornea.	Removal of glass plus antibiotic treatment. No surgery.	O.D. — O.S. —	4 1961
18 A.W.C. St. Jo's	31 Male	Thrown horse shoe	Laceration of cornea & prolapse of iris; four small glass F.B.'s in cornea. O.D. Later development of traumatic cataract O.D.	Repair of corneal laceration, iris prolapse and removal of retained F.B.'s plus later surgical procedure for removal of cataract O.D.	O.D. 20/20* O.S. 20/20 *Corrected. Aphakic contact lens.	10 1973
19 J.R.H. St. Jo's	39 Male	Hammered nail	Laceration of sclera, cornea and conjunctiva; retained glass F.B.'s O.D.	Repair of lacerations and removal of glass F.B. under general anesthesia	O.D. 20/40 O.S. 20/25	6 1961
20 O.T.M. St. Jo's	66 Male	Auto crash	Multiple lacerations cornea and upper lid O.S. Later cataract development.	Repair of lacerations under general anesthesia, plus one day admission for suture removal.	O.D. 20/20 O.S. (light perception & projection)	8 1970
21 R.L.M. St. Jo's	30 Male	Hit with Fist	Corneo-scleral laceration; multiple avulsions and lacerations upper & lower lids. O.S.	Repair of lacerations and avulsions under general anesthesia.	O.D. 20/30 O.S. 20/80-100	5 1973
22 D.L.S. St. Jo's	8 Male	Hammer	Lacerated sclera & upper conjunctiva O.D. No retained foreign body.	Repair of lacerations under general anesthesia.	O.D. 20/50 O.S. 20/30	4 1969
23 J.E.G. V.A.H.	43 Male	Auto crash	Total disorganization of globe O.S.	Enucleation of left eye.	O.D. 20/30 O.S. None	8 1965
24 M.C.C. V.A.H.	25 Male	Fainted & fell	2 small pieces of glass superficially in corneal epithelium. O.S.	Removal with swab and thorough irrigation.	O.D. 20/20 O.S. 20/25	1 1973
25 P.W.G. St. Mary's	26 Male	"Monkey Wrench" slipped	Extensive corneo-scleral lacerations (rupture) with uvea and vitreous prolapse; extrusion of lens. No retained F.B.'s.	Repair of corneo-scleral rupture.	O.D. — O.S. —	5 1973

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GRAND ROUNDS



The University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Chronic Disease and Rehabilitation: Rheumatoid Arthritis

Doctor J. M. Kotchen: The primary purpose of our presentation today is to discuss disability and a variety of factors important in rehabilitation. As an example of a potentially disabling chronic condition, we have selected a patient with severe rheumatoid arthritis. In such a patient the availability of innovative personal and increasingly available community resources may have a profound impact on the patient's capacity to maintain function.

Chronic disability is a major health concern. According to interview data collected in a 1969 National Health Survey, approximately 12 per cent of the American population reported some limitation of activities because of chronic conditions. Six per cent had limitation in major activities and more than two per cent were totally unable to function independently. One-quarter of individuals experiencing limitations in activity experienced those limitations because of arthritis. Overall, among persons with arthritis the extent of the disability experienced is inversely related to the ability to earn a living, and it is directly related to the cost of medical care and the cost of other services. The social cost of the problem is also great. Divorce among arthritics is frequent and those individuals with functional limitations who lack close family associations may be particularly in need of community resources. At the present time in Fayette County, it is estimated that there are 20,000 persons with arthritis and 3,000 of these individuals are currently receiving community services through the Fayette County Health Department.

The participants in today's conference are C. Richard Gill, M.D., an internist and rheumatologist with the Lexington Clinic, who will present a patient whom he has followed for some time, and Philip G. Weiler, M.D., Director of the Lexington-Fayette County Health Department. Doctor Weiler has been instrumental in the development and augmentation of community services to meet the needs of persons with chronic disabilities in Fayette County.

Doctor Gill: The patient is a 58-year-old Caucasian man and professor at this university. He first developed signs and symptoms of rheumatoid arthritis in 1947. It began in his metatarsophalangeal joints, the foot and then involved his shoulders and wrists. In 1948, because of functional disability, he was unable to continue in his career as a professional singer and dancer and began to pursue an active career in television despite progressive arthritic involvement.

From 1947 until 1953 he was treated with salicylates, phenylbutazone, and occasionally steroid injections. He had remissions and exacerbations during this period of time, but in spite of this and with great determination, he still played some handball and had a part-time job as a commercial airline pilot. Possibly because of his arthritis and his difficulty performing on stage, he went on to get a college degree. At some time during the late 1950's he began oral steroids which he has continued taking for 20 years.

In 1960 and 1962, he entered the hospital for the first time, not so much for treatment of his rheumatoid arthritis in general, but for surgical repair of ruptured thumb tendons. In 1967, he received his Ph.D. degree. He continued to have periodic remissions and exacerbations, gradually worsening, gradually lasting

a little bit longer, and accompanied with more disability. He was given indomethacin when that was available and was instructed in physical therapy programs.

In 1966, while working for his doctorate degree, he developed aching and noise with movement of the neck. X-ray studies revealed a cervical atlantoaxial subluxation of 12 mm, and the consensus of several consulting physicians was that surgical correction should not be undertaken because of high surgical morbidity and mortality, but that he should be followed carefully for neurological signs. He was advised to wear a soft collar to prevent hyperextension injury to the neck. It is cumbersome to use and he tends to reject wearing it.

I first saw him in 1968 at which time he was taking 10 mg of prednisone daily, 9-12 enteric coated aspirin per day, 100 mg of indomethacin a day and propoxyphene at times. In 1971 he developed symptomatic duodenal ulcer which was successfully treated with diet, antacids and antispasmodics. In 1972 generalized arthritic symptoms recurred and for the first time in 25 years since the onset of his illness he was hospitalized for 10 days for treatment for generalized rheumatoid arthritis. He was treated with rest, physical therapy and some alteration in his medication. Following this, he continued to work regularly. By 1973, however, he was having more difficulty and for the first time began to have trouble with his knees. Surprisingly, and unfortunately, over a period of six months, we had documented negative hip x-rays and within six months the patient experienced profound destruction in his right hip. He had pain and disability requiring intra-articular aspirations and injections every two months. About a year ago, he had prosthetic replacements of both knees and his right hip. His recovery has been excellent. Prior to surgery, he was on platform crutches, but at the present time he is able to walk without any assistance.

As far as his generalized rheumatoid arthritis is presently concerned he has peripheral joint involvement, extensive boney erosions in his hands and in his elbows, and the chronic neck problem. He has no signs of significant eye problems, pleurisy or pulmonary disease, hematologic problems, or peripheral neuropathy. At the present time, he is maintained on enteric coated aspirin 12 a day and prednisone 7 mg daily in divided doses. I think that the fact that he has been on steroids for 20 years and yet looking at him you really don't see a whole lot of hypercortisonism really points out that if you use low doses you can get a good effect and you don't get the ravages of hypercortisonism. He is taking indomethacin, propoxyphene, and occasionally takes Percodan or Dalmane. He still follows his physical therapy program utilizing range of motion exercises as tolerated and muscle strengthening exercises especially directed toward the quadriceps.

Concerning his present functional capacity, he requires about two and a half hours in the morning for dressing, eating and driving his car several miles to work. He can shower without too much difficulty. He does have some trouble getting his arms up to comb his hair. He dresses himself although he has a little trouble getting on his left sock and cannot tie his shoes. When his wife is not available, he uses a little gadget to help himself on with his left sock. He can eat by himself and although he is right-handed, he tends to use his left hand. He holds an academic position at the university and is at work from about 10 a.m. until 6 p.m. He then returns home and rests. It is unfortunate that there isn't a place for him to lie down and rest at work. Adequate rest is essential for persons with rheumatoid arthritis.

Despite more than 25 years of extensive disease, his attitude has been that he can lick this thing and the fact that he has readjusted his life style and his occupation to those activities which he can do best considering his limitation is attributable to his planning, his foresight, and his intelligence.

Doctor Weiler: This patient represents an excellent example of a chronic and potentially disabling condition. His motivation and capacity to adapt to his physical limitations have permitted him to remain functional and active throughout 28 years of illness. I would like to make several points about this patient. The first point is that during his prolonged illness, he has spent little time in the hospital. This means that as physicians, we have limited exposure to his disease. The great bulk of his difficulties are occurring at home and his ability to function has depended on appropriate environmental adaptations.

A second point I want to make is that chronic disease rehabilitation requires a team effort. As we have seen in this case, efforts of rheumatologists, surgeons, and neurologists were supplemented by physical therapists and probably occupational therapists as well. Long-term rehabilitation is an area where allied health professionals may play a major role. The final point I'd like to emphasize about this patient is the tremendous number of resources, as well as a delicate balance between assistance and independence, that are needed for him to be kept functioning at his maximum level. A frequently encountered problem in managing persons with chronic disabilities is the availability of too much assistance which may result in rapid deterioration of the individual's physical and mental functioning. This patient has been fortunate to have personal resources such as his own determination and intellectual capabilities, financial security, and a dedicated family.

My particular interest is in the development of innovative community resources which may supplement or serve in lieu of personal patient resources. In attempting to address community resources to the needs of persons with chronic disability, we evaluate persons in several general areas and attempt to augment competence in these areas. These areas include physiological and physical competence, domestic competence, emotional-social-intellectual competence and financial competence.

As physicians, we are primarily concerned with physiological and physical competence of the patient. We focus on functioning of vital body systems and prescribe and monitor medications which will interact favorably with the patient's disability to improve function. We are concerned with evaluating, preserving and improving physical competence of the patient. It is often helpful to work with physical therapists who are expert in developing plans for improving and maintaining muscle strength and movement. They are successful, as well, in implementing these programs by educating and motivating patients to continue on prescribed programs independently. The patient presented today carries out his own physical therapy program in his home.

Improvement in the domestic competence of the patient with a disabling condition is a primary concern of the occupational therapist. It is often not appreciated that occupational therapists are highly competent in critical evaluation of the home in order to adapt the home environment to the special needs of the disabled patient. Occupational therapists look with particular care to adapt the bedroom, bathroom and kitchen, because adequate functioning in these areas of the home are imperative to the patient's independence in activities of daily living. Alleviation of simple mechanical problems in these areas may permit disabled persons to stay at home and do very well. Unfortunately, Kentucky does not have a school of occupational therapy and there are relatively few occupational therapists available in the community.

Finally, the assistance of the social worker is often helpful in improving emotional, intellectual and financial competence of patients. Their assistance is particularly helpful to those patients who have a paucity of personal resources, are in financial difficulty, or need help in locating appropriately modified work situations.

I would like at this time to briefly mention some specific community resources that are available to persons with chronic disabilities in Fayette County. Many voluntary agencies address the needs of persons with specific disabilities. For a patient such as the one presented today, the Arthritis Foundation is available for a great deal of assistance, not only to physicians for research and continuing education, but also for self-help to patients in the form of educational materials, specific tips, and catalogs of devices which assist arthritics to function. Meals on Wheels is a voluntary organization which brings two meals a day to the homes of individuals who are unable to prepare their own meals.

The Lexington-Fayette County Health Department provides a variety of services to assist in the maintenance and rehabilitation of patients in the community. One of these services is the Home Health Agency through which skilled nursing care, physical therapy, speech therapy, occupational therapy and nutritional consultation can be made available to patients in their homes at the physician's request. Homemaker services have recently become available through the Lexington-Fayette County Health Department and provide home maintenance and personal care services for patients at home.

An exciting new community resource available through the Health Department is the adult day health center which we are calling the Center for Creative Living. At the Center, persons with chronic disability who live at home are provided with appropriate physical, speech and occupational therapy, as well as transportation to and from the Center, a midday meal and a variety of activities. The aim of the Health Department in providing all of these services is to work closely with physicians to make comprehensive rehabilitation services available to patients in the community.

Doctor Kotchen: Because of the constraints of time, this review of disability and community resources available for rehabilitation has been superficial and incomplete. However, I would hope that it has provided an introduction to some of the existing community programs and that it will serve to encourage greater utilization of these services in the management of patients with chronic disabilities. I would also like to add that the Lexington-Fayette County Health Department is currently undertaking a project to assess adult day health services and homemaker services in the long-term care of disabled persons 65 years of age or older. The outcome of the study should provide additional information on the needs of persons in the community and information on how these needs might be met.

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* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

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Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

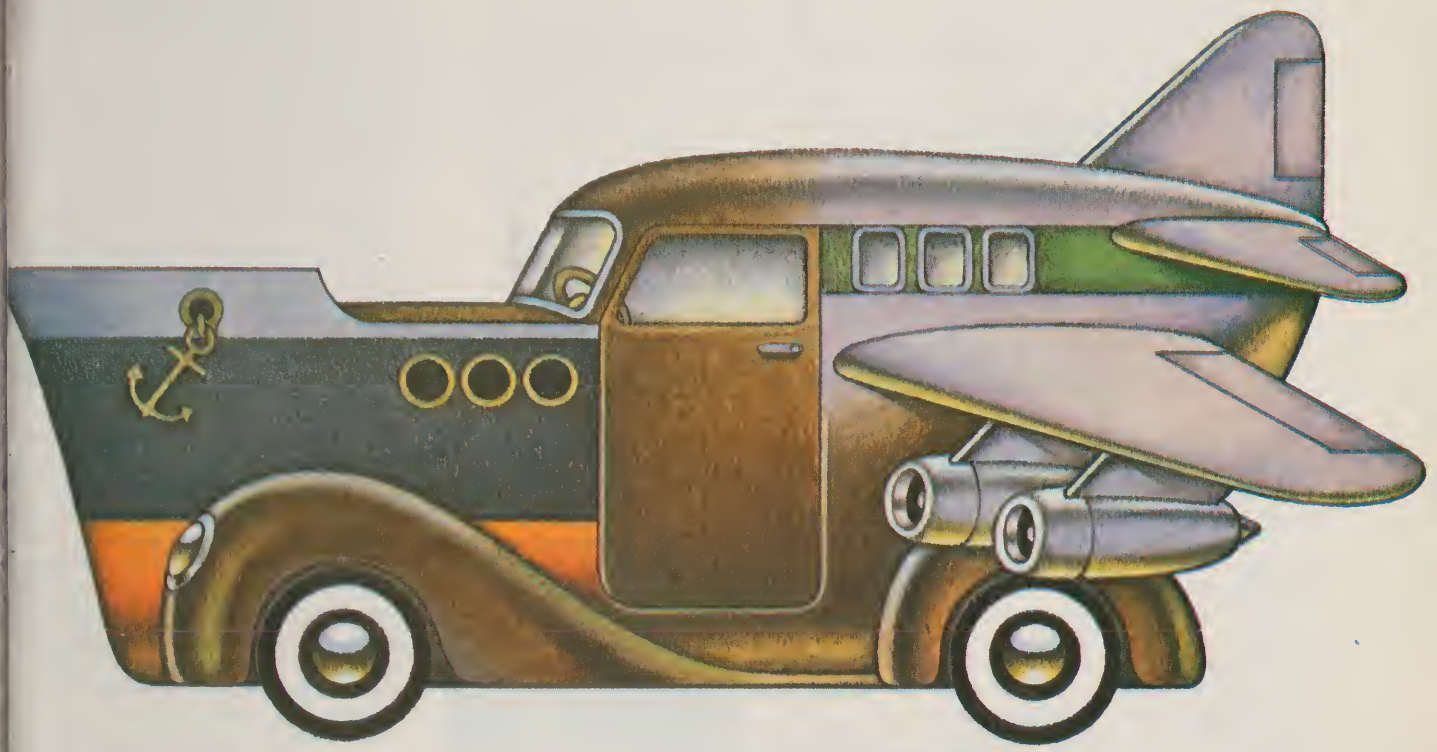
Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the information is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

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P·M·A

EDITORIAL

A Proposal

WHEN my father started to practice medicine, things were a lot simpler. They probably didn't seem simple, but by our present standards they certainly were. The year was 1913. The population of the world was less than half what it is now. We were 48 years past the Civil War. Physicians were entering the Flexnerian era of schooling, and the Halstedian era of postgraduate residencies. The profession of medicine had the respect of the general public—more then for its compassion than its scientific precision, I suspect, but during his lifespan the incredible accumulation of knowledge that was to mark the next half-century in medicine reinforced and magnified that respect immensely.

Medicine was not progressing alone.

In the same period automobiles and planes eliminated the twin barriers of geography and distance, intermingling goods and people on a scale never before possible. Easy mobility became a major factor in the disintegration of many old-fashioned family units. Willkie said it, and we came to believe it—"One World".

Radio and TV came into being. Till 1940 a diversion, in World War II radio with its news services helped unify America (remember Murrow and Heatter), and a "Communications Medium" was born. With TV added about 1950, the Media have developed insatiable appetites for program material, especially news, and as a result we now know, willy-nilly, more of our fellow man's activities than is perhaps necessary or desirable. As their influence on American character has become preeminent, (certainly greatly out of proportion to the quality of the subject matter presented), radio and TV utterances have become blurred in the public's mind so that news and opinion sometimes become one and the same—as McLuhan said, "The medium is the message."

Electronics has presented us with many wonders. The one most far-reaching development has probably been the computer, which arrived just at the time we were nearly perishing in oceans of data. Outside the field of science, it has made possible modern banking, use of national charge cards, airline ticketing, etc. It has also made possible massive screening of IRS returns, Medicare costs and utilization rates, and other such policing functions, and has become, with its allies Easy Travel and Communications, a very important supporting structure for a strong central government.

Easy Travel, with frequent moves of the individual from place to place in the nation, diminishes relationships with cities and states, and emphasizes, by default, a stronger relationship with the Federal government.

Communications, needing "news", and being the major single source of data for almost all our citizens, is a natural and willing hand-maiden to Washington.

Computers, which not only collect masses of data, but analyze it for deviations from the norm, make surveillance of 220 million people not only possible, but probable, from a centralized agency.

Quite a picture, isn't it? Many other factors, of course, are at play here—I've only mentioned three, and for a purpose. It is my aim to indicate how some of the prominent developments of the previous generation have acted to increase the power of a Strong Central Government in our lives, and to point out, further, how such power affects us as physicians. The views of individual physicians (voices of influence in older, more locally-oriented days) are powerless now to affect processes underway in Washington. As a means of keeping the scales more nearly balanced, we must have the development of a Strong Central Voice for physicians. A strong organization, a strong unified voice, is needed.

The AMA is the natural choice. It has tradition and history, it has a form of democratic representation in its House of Delegates, it is open to all physicians. What it does not have is a decent reputation, either with its members or with the public at large, as a progressive fighter for the welfare of either. Much of its recent time, money and energy seems to have been taken up with internal political squabbles. It has failed to speak clearly on national issues, or with a consistent and unified opinion.

I believe one measure of reform would eliminate many of the negative features the AMA now demonstrates. I believe the AMA presidency should be established as a four-year-term, with one re-election possible, and I believe the election should be decided by popular vote rather than in the House of Delegates. This move would restore to the rank and file physician a sense of participation, and a feeling of some control (that he now lacks) over his own political destiny. It would establish AMA membership as something of value. It would give the president time to grow in the job to the point where he could speak with authority. It would offer to us and to the public an easily understood parallel to our national Presidency. Till this change is accomplished I predict we in medicine will continue to feel detached from the AMA, will feel staffers are running it behind the scenes, will continue to deprecate the one organization we really need to speak for us and for our patients.

KMA meets in Louisville next month (September 23-25). Please come, and make your views known.

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Average cost in Kentucky (BC-BS Data)
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$86.68
(Range: $70-$115)



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

CASE 5-73. This 23-year-old, single, Black, female, Gravida 2, Para 1, was seen initially with this pregnancy May 8, 1973, when she was approximately 26 weeks pregnant. She was delivered by Cesarean section in 1969 with an elective appendectomy and had a normal postoperative course. She was seen as follows:

DATE	WT.	B P	URINE
5/8	216 lb.	120/70	Negative
6/18	218 lb.	120/74	Negative
7/7	223 lb.	124/74	Negative

Last menstrual period was October 18, 1972, with expected delivery date of July 25, 1973. She was admitted to the hospital at 6:30 a.m. the 24th of July having contractions every 10 minutes, blood pressure 100/70; temperature 98; pulse 88; respiration 22, hematocrit 32%, Hbg 10.0, WBC 10,400, segs 81, lymph 6, urine negative; blood type AB Rh+. X-ray pelvimetry was obtained and reported as having a poorly shaped sacrum, probable borderline pelvic measurements. She complained with her contractions, which were mild every four to five minutes at 6 p.m. She received 100 mg Meperidine IM. She slept until 1:35 a.m. the 25th when she again complained with contractions and received 100 mg Meperidine. She slept till 5 a.m. when she again complained with the contractions. Vaginal examination revealed the cervix thinning and the presenting part descending. She received 50 mg Meperidine IM. A Foley catheter was inserted, and she was premedicated with 10 mg Diazepam and 0.4 mg Atropine IM at 6:45 a.m.

She received a spinal consisting of 3 cc 0.3% Tetracaine Hydrochloride with 6% dextrose while she was lying on her side. She was prepped abdominally after starting IV fluids of Ringers Lactate.

While being draped, it was noticed she had no respiration, pulse or blood pressure. Attempts at cardiac massage were without success. She received 1 cc Adrenalin and 1 cc Methoxamine Hydrochloride IV and oxygen. She was defibrillated six times without any return of cardiac action. A post-cardiac arrest Cesarean was performed with delivery of a living 7 lb 14 oz male infant that did well.

The cause of death was listed as cardiac arrest. The family refused an autopsy.

Comments

The Committee classified this death as a direct obstetrical death with possible preventable factors. It was noted that she had had a previous Cesarean section and was apparently at term. The Committee felt that she should have had a Cesarean section carried out within a few hours of her admission to the hospital, rather than waiting as long as was done in this case for it is possible that she underwent rupture of the previous uterine scar and that the cause of her cardiac arrest might have been shock due to blood loss.

There was criticism of the method of administering the anesthetic, although it is admitted that many people do this. It is most likely that she suffered a total spinal which was not properly treated.

Again, it is impossible to say what the cause of death was since an autopsy was not obtained. It is unfortunate that this is so frequently the situation in our maternal mortality cases.

1975

Annual Meeting Section

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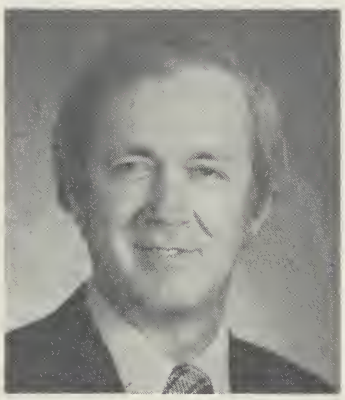
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KMA Officers

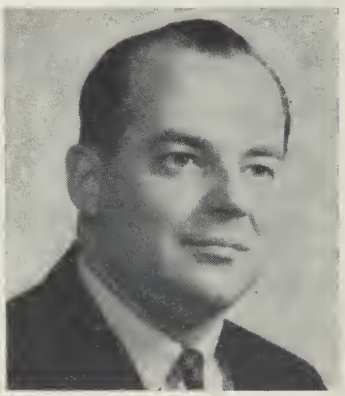
1974-1975



HOYT D. GARDNER, M.D.
PRESIDENT



David A. Hull, M.D.
President-Elect



Laszlo Makk, M.D.
Vice-President

PRESIDENT-ELECT
David A. Hull, M.D.
Lexington

David A. Hull, M.D., will be installed as President of the Kentucky Medical Association at the President's Luncheon to be held Wednesday, September 24.

A general surgeon, Doctor Hull is a 1947 graduate of the University of Tennessee Medical School. He is an Associate Clinical Professor of Surgery at the University of Kentucky Medical Center, and a member of the teaching staff at three Lexington hospitals.

Doctor Hull is a past President of the Fayette County Medical Society and of the Kentucky Foundation for Medical Care. Extremely active in Association affairs, he has served KMA as Delegate, Vice-President, Trustee, and Chairman of the Board.

This past year Doctor Hull has served as Chairman of the Committee on National Legislative Activities and as a member of the Committee on State Legislative Activities, continuing his interest in the field of political activity.

Doctor Hull holds memberships in the American College of Surgeons, the American Proctologic Society, and the Pan-American Medical Association, Inc.

VICE-PRESIDENT
Laszlo Makk, M.D., Louisville

A pathologist and a surgeon, Doctor Makk is an Assistant Clinical Professor in Pathology at the University of Louisville School of Medicine. A 1960 graduate of Albany Medical College, he is Director of Laboratories, Chief Pathologist, and Director of the School of Medical Technology at St. Anthony Hospital in Louisville.

He is a Diplomate of the National Board of Medical Examiners and certified by the American Board of Pathology in Pathologic Anatomy and Clinical Pathology.

Doctor Makk has been active in several medical organizations, and is a Fellow of the College of American Pathologists and the American Society of Clinical Pathologists. He currently is a member of the KMA Advisory Committee to Blue Cross and Blue Shield.

SECRETARY
S. Randolph Scheen, M.D., Louisville

Doctor Scheen, serving his eighth year as KMA Secretary, is a Louisville dermatologist and Assistant Clinical Professor at the University of Louisville and University of Kentucky medical schools. He received his M.D. in 1953 from the U of L and his M.Sc. degree in 1960 from the University of Minnesota. He is a member of the American Academy of Dermatology and the Alumni Association of the Mayo Foundation. Doctor Scheen serves on the KMA Judicial Council and has been most active in service to the Association.



TREASURER
Keith P. Smith, M.D., Corbin

In addition to serving KMA as its Treasurer since 1963, Doctor Smith is a former Association Vice-President and Chairman of the Board of Trustees. A 1936 graduate of the University of Louisville School of Medicine and a 1944 graduate of the School of Aviation Medicine, Texas, Doctor Smith is a general surgeon. An active member of the Kentucky Academy of Family Physicians, he has served as Academy President and Vice-President. He belongs to the Southern Surgical Association and Kentucky Obstetrical and Gynecologic Society.

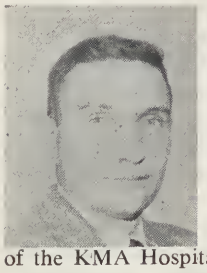


SPEAKER OF THE HOUSE
Carl Cooper, Jr., M.D., Bedford

Prior to being elected Speaker in 1974, Doctor Cooper served as Vice-Speaker of the House and is a former KMA Vice-President and Alternate Delegate to AMA. He is the current Chairman of the KEMPAC Board of Directors and has also been active in the Kentucky Academy of Family Physicians. A family practitioner in Bedford since 1953, Doctor Cooper is a 1952 graduate of the University of Louisville School of Medicine. He is a Fellow of the AAFP and received the KAFP "Citizen Doctor of the Year" Award in 1970.



VICE-SPEAKER
Richard B. McElvein, M.D., Lexington



Doctor McElvein, an Associate Clinical Professor of Surgery at the University of Kentucky, is a 1951 graduate of Tufts University School of Medicine. He is currently in the private practice of thoracic surgery. A former President of the Fayette County Medical Society, the Kentucky Thoracic Society and the Kentucky Lung Association, Doctor McElvein has been Chairman of the KMA Hospital Committee since 1973. He belongs to the American College of Chest Physicians and the Society of Thoracic Surgeons.

AMA DELEGATE
J. Thomas Giannini, M.D., Louisville



Doctor Giannini has served KMA as a Delegate to AMA since 1963. He is a 1938 graduate of the University of Louisville School of Medicine and served in the U.S. Navy Medical Corps. Doctor Giannini, former Chairman of the KMA Scientific Exhibits Committee, was a KMA delegate from the Jefferson County Medical Society for several years. He is a former Secretary-Treasurer of the Kentucky Society for Plastic and Reconstructive Surgery and now serves on the Board of the Kentucky Blue Cross Hospital Plan, Inc.

AMA Delegates

David B. Stevens, M.D., Lexington



Elected as an AMA Delegate in 1971, Doctor Stevens served as an alternate delegate to AMA and has belonged to the AMA Committee on Quackery. He is a former Chairman of the KMA Committee on Cults. A 1955 graduate of Northwestern University Medical School, Doctor Stevens is a past President of the Fayette County Medical Society and the Kentucky Orthopaedic Society. An Assistant Clinical Professor of Surgery at the University of Kentucky, Doctor Stevens is currently a member of the American Academy of Orthopaedic Surgeons.

Fred C. Rainey, M.D., Elizabethtown



Doctor Rainey is the Immediate Past President of KMA and currently serves as Chairman of the KMA Public Relations Committee. Elected as AMA Delegate in 1974, he previously served as an Alternate Delegate to AMA and is a past Chairman of the KEMPAC Board. A 1955 graduate of the University of Tennessee College of Medicine, Doctor Rainey is a family practitioner and belongs to the Kentucky Academy and American Academy of Family Physicians. He also has been active in numerous civic organizations, including the Jaycees and the Kentucky Chamber of Commerce.

Journal Editors

EDITOR
Walter I. Hume, Jr., M.D., Louisville



Associated with *The Journal* since 1967, Doctor Hume has served as Editor for five years. He is an Associate Clinical Professor of Surgery at the University of Louisville and is a 1949 graduate of Harvard. A past President of the Jefferson County Medical Society, he now serves as a member of the Board of Directors of numerous professional organizations, including OVRMP, KPRO, Falls Region Health Council and Blue Cross-Blue Shield. Doctor Hume is also a member of the KMA Advisory Committee to KPRO and belongs to several surgical associations.

ASSOCIATE EDITOR
Henry B. Asman, M.D., Louisville



Now in his fifth year as Associate Editor, Doctor Asman has been active in numerous facets of Associational work. He is a past President, Vice-President and Secretary of KMA; was the first President of the Kentucky Foundation for Medical Care, and has served many hours on KMA committees. A 1936 graduate of the University of Louisville School of Medicine, Doctor Asman is a Fellow of the American College of Surgeons and a past President of the Ohio Valley Proctologic Society. He currently is Director of Medical Services for Kentucky Blue Cross and Blue Shield.

ASSISTANT EDITORS

A. Evan Overstreet, M.D., Louisville

An internist, Doctor Overstreet is a 1955 graduate of the University of Louisville. He belongs to the American Society of Internal Medicine, American College of Physicians and the Transylvania Medical Society. Doctor Overstreet has served as Assistant Editor since 1972.

John S. Llewellyn, M.D., Louisville

Doctor Llewellyn, serving his first year as Assistant Editor, is a former KMA Trustee (1969-72) from the Fifth District. A Fellow of the American College of Physicians, Doctor Llewellyn graduated from Loyola University in 1940 and is a member of the American Society of Internal Medicine.

G. Randolph Schrodt, M.D., Louisville

Currently a Professor of Pathology and a 1954 graduate of the University of Louisville, Doctor Schrodt is also a new member of the Editorial Board. He belongs to numerous professional organizations, including the American Association of Pathologists and Bacteriologists and the American Society of Pathologists.

SCIENTIFIC EDITOR

Paul C. Grider, Jr., M.D., Louisville

Serving his first year as Scientific Editor of *The Journal,* Doctor Grider has been in the private practice of internal medicine in Louisville since 1964. A 1958 graduate of the University of Louisville School of Medicine, he served in the U.S. Air Force from 1962-64.

New Trustees

Jerry D. Fraim, M.D., Paintsville

Doctor Fraim now serves as KMA Trustee from the Fourteenth District. A 1962 graduate of the University of Tennessee, he is a former member of the KEMPAC Board of Directors, a member of the American Academy of Family Physicians and a Diplomate of the American Board of Family Practice.

James B. Holloway, Jr., M.D., Lexington

A former Vice-President of KMA, Doctor Holloway serves now as Trustee from the Tenth KMA District and is Chairman of the Interspecialty Council. A 1945 graduate of Yale University, Doctor Holloway is a Fellow of the American College of Surgeons and a past President of the Fayette County Medical Society.

Richard J. Menke, M.D., Covington

Elected in 1974 to fill the unexpired term of Trustee in the Eighth KMA District, Doctor Menke is an orthopaedic surgeon practicing in Covington since 1960. A 1953 graduate of St. Louis University, he is a member of the American Academy of Orthopaedic Surgeons and is a past President of the Campbell-Kenton Medical Society.

Frank R. Pitzer, M.D., Hopkinsville

Doctor Pitzer was elected as Trustee of the Third Trustee District and currently serves on the KMA Claims and Utilization Review Committee. A 1961 graduate of the University of Tennessee, he is President-Elect of the Kentucky Pathology Society and a Fellow of the American College of Pathology.

Charles B. Spalding, M.D., Bardstown

Serving as Fourth District Trustee, Doctor Spalding received his M.D. degree from the University of Louisville in 1953. He is also active in the affairs of the Kentucky Academy of Family Physicians, having served as a former Speaker of the House and a member of the KAFP Board of Directors.

William T. Watkins, M.D., Somerset

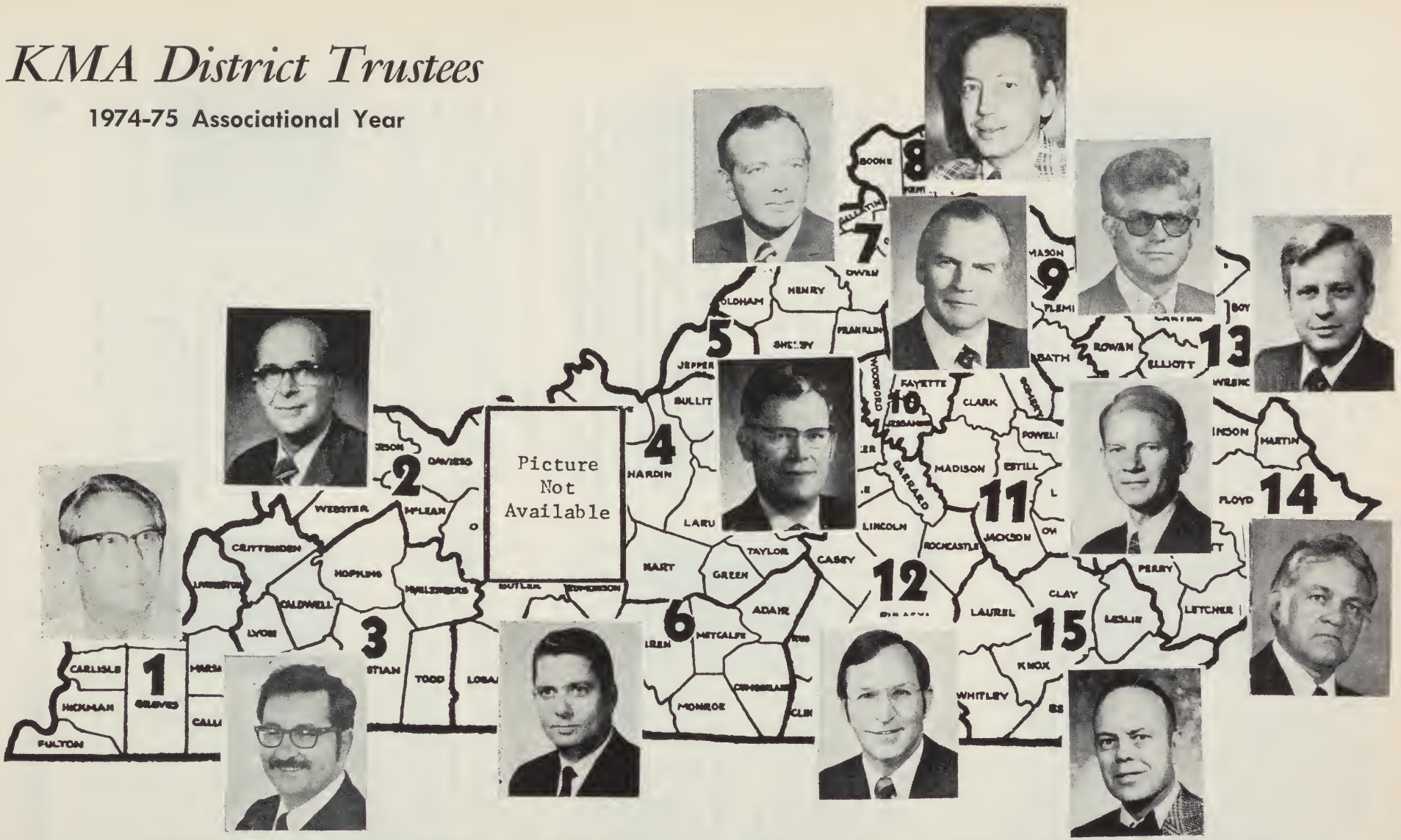
Elected as Trustee from the Twelfth Trustee District, Doctor Watkins has also served KMA as a past Chairman of the Technical Advisory Committee on Physician Services. He is a 1960 graduate of the University of Tennessee, a Fellow of the American Academy of Pediatrics and a past President of the Pulaski County Medical Society.

MESSAGE CENTER
491-1929

You may be reached through this number at the Bluegrass Convention Center during the KMA Annual Meeting, September 23-25.

KMA District Trustees

1974-75 Associational Year



1. W. EUGENE SLOAN
Paducah

2. CHARLES C. KISSINGER
Henderson

3. FRANK R. PITZER
Hopkinsville

4. CHARLES B. SPALDING
Bardstown

5. EDWARD N. MAXWELL*
Louisville

6. PAUL J. PARKS*†
Bowling Green

7. JOHN P. STEWART*
Frankfort

8. RICHARD J. MENKE
Covington

9. JAMES L. FERRELL
Paris

10. JAMES B. HOLLOWAY, JR.
Lexington

11. R. EUGENE BOWLING
Richmond

12. WILLIAM T. WATKINS
Somerset

13. J. WESLEY JOHNSON
Ashland

14. JERRY D. FRAIM
Paintsville

15. HAROLD L. BUSHEY*
Barbourville

**Member, KMA Executive Committee*
†Chairman, Board of Trustees

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ALLEN
Earl P. Oliver, Scottsville

ANDERSON
H. Boyd Caudill, Lawrenceburg

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Jerry C. Sutkamp, Bellevue

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Cecil D. Martin, Carrollton

CARTER

CASEY
Lewis E. Wesley, Liberty

CLARK
Robert F. Brashear, Winchester

CLAY
W. E. Becknell, Manchester

CLINTON
Floyd B. Hay, Albany

CRITTENDEN
Wes L. Creager, Marion

CUMBERLAND
Joseph Schickel, Burkesville

DAVIESS
James H. Callis, Owensboro
William E. Pearson, Owensboro
Glen D. Richards, Owensboro

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Walter R. Brewer, Lexington
Thomson R. Bryant, Jr., Lexington
P. Raphael Caffrey, Lexington
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Richard D. Floyd, Lexington
Ward O. Griffen, Lexington
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C. Nicholas Kavanaugh, Lexington
Carl H. Scott, Lexington
John M. Stoeckinger, Lexington
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Carl E. Shroat, Frankfort

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GALLATIN
John D. Fielding, Warsaw

GARRARD
O. S. Playforth, Lancaster

GRANT
Roscoe M. Goodman, Williamstown

GRAVES

GRAYSON
Ray A. Cave, Leitchfield

GREEN
George C. Cheatham, Greensburg

GREENUP
Thomas E. Stevens, Flatwoods

HANCOCK
B. C. Smith, Hawesville

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Terrell D. Mays, Elizabethtown

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Orides Bonadio, Harlan

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Don R. Stephens, Cynthiana

HART
Clem E. Nichols, Munfordville

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Alvin M. Churney, Louisville
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Rudy J. Ellis, Louisville
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Darius Ghazi, Louisville
Leonard A. Goddy, Louisville
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Anne C. D. Richman, Louisville
R. Parnell Rollings, Louisville
W. Fielding Rubel, Louisville
Robert M. Senese, Louisville
Charles B. Severs, Valley Station
Sam Smith, Louisville
David L. Stewart, Louisville
T. Bodley Stites, Louisville
Gerald D. Temes, Louisville
Walter L. Thompson, Louisville
Walter L. Wilson, Louisville
Marvin A. Yussman, Louisville

JESSAMINE
J. Sankey Williams, Nicholasville

JOHNSON
Franklen K. Belhasen, Paintsville

KNOTT
W. Grady Stumbo, Hindman

KNOX
Rufino F. Crisostomo, Barbourville

LARUE

LAUREL

LAWRENCE

LEE
Arnold L. Taulbee, Beattyville

LESLIE
Frank J. Lepreau, Jr., Hyden

LETCHER
James B. Tolliver, Whitesburg

LEWIS

LINCOLN

LIVINGSTON
Stephen Burkhart, Salem

LOGAN
C. V. Dodson, Russellville

MADISON
Don E. Cloys, Richmond
Linda S. Fagan, Richmond

MAGOFFIN

MARION
N. D. Widmer, Lebanon

MARSHALL
Keith E. Ellis, Benton

MARTIN
Raymond D. Wells, Inez

MASON

McCRACKEN
Charles J. Bohle, Paducah
James C. Embry, West Paducah
Wally O. Montgomery, Paducah

McCREARY

McLEAN
W. G. Edds, Calhoun

MEADE

MENIFEE

MERCER
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METCALFE
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MONROE
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MONTGOMERY

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PENDLETON
Robert L. McKenney, Falmouth

PENNYRILE MULTI-COUNTY
Caldwell: N. H. Talley, Princeton
Christian: Carl B. Caplinger, David Crowder, Hopkinsville
Muhlenberg: Gary Givens, Central City
Todd: Larry Brock, Elkton
Trigg: Nat Richardson, Cadiz
Lyon: Steve Hiland, Eddyville

PERRY
Keith Cameron, Ary

PIKE
Harvey A. Page, Pikeville
Oscar W. Thompson, Pikeville

POWELL
Samuel E. Cecil, Stanton

PULASKI
J. Roy Biggs, Somerset
D. M. Clark, Somerset

ROBERTSON

ROCKCASTLE
George W. Griffith, Mt. Vernon

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Gus A. Bynum, Georgetown

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SIMPSON
J. Michael Pulliam, Franklin

SPENCER
William K. Skaggs, Taylorsville

TAYLOR
Forest F. Shely, Campbellsville

TRIMBLE
Carl Cooper, Jr., Bedford

UNION
Wallas N. Bell, Sturgis

WARREN
Keith M. Coverdale, Bowling Green
Nelson B. Rue, Bowling Green
Jerry E. Sullivan, Bowling Green

WASHINGTON

WAYNE
Frank L. Duncan, Monticello

WEBSTER

WHITLEY
R. D. Pitman, Williamsburg

WOLFE
Paul F. Maddox, Campton

WOODFORD
A. J. Alexander, Spring Station

Nominating Committee To Meet Monday, September 22

An open meeting of the KMA Nominating Committee will be held following the close of the first session of the House of Delegates, Monday, September 22, in the Jeffersonian Rooms of the Ramada Inn.

Any KMA member has the privilege of conferring with the Committee during this meeting. Final recommendations of the Committee will be reported at the end of the first scientific session, Tuesday morning, September 23.

Nominations may be made from the floor during the second meeting of the House of Delegates, Wednesday evening, September 24. The House will vote on the nominees at the close of this session.

Members of the Nominating Committee, chaired by John M. Baird, M.D., Danville are: Keith M. Coverdale, M.D., Bowling Green; A. B. Richards, M.D., Louisa; James C. Salato, M.D., Columbia; and James C. Seabury, M.D., Paducah.

Reference Committee Activity

Speaker Carl Cooper, Jr., M.D., Bedford, will assign all officers' and committees' reports and resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9:00 a.m., Monday, September 22. **Briefing sessions** for Reference Committee Chairmen will be held at **12:30 p.m., Monday,** in the **Majestic Room, Bluegrass Convention Center.** Any KMA member wishing to testify on any resolution or report is urged to be present for the **Reference Committee meetings** which will be held at **2 p.m., Monday, September 22, at Bluegrass Convention Center.** These open sessions will last one hour in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be presented at the final session of the House, Wednesday night, September 24, in the Bluegrass Convention Center. Listed below are the Reference Committees appointed by Doctor Cooper to serve during the 1975 session.

1975 Reference Committee Appointments

REFERENCE COMMITTEE NO. 1

Island Queen and Idlewild Rooms

Peter P. Bosomworth, M.D., Lexington, Chairman
Don E. Cloys, M.D., Richmond
Wally O. Montgomery, M.D., Paducah
W. Fielding Rubel, M.D., Louisville
Raymond D. Wells, M.D., Inez

REFERENCE COMMITTEE NO. 2

Cincinnati Room

Nelson B. Rue, M.D., Bowling Green, Chairman
Colby N. Cowherd, M.D., Lexington
Harold D. Haller, M.D., Louisville
Cecil D. Martin, M.D., Carrollton
Don R. Stephens, M.D., Cynthiana

REFERENCE COMMITTEE NO. 3

Eclipse Room

Earl P. Oliver, M.D., Scottsville, Chairman
McHenry S. Brewer, M.D., Louisville
Kenneth M. Eblen, M.D., Henderson
Harvey A. Page, M.D., Pikeville
John M. Stoeckinger, M.D., Lexington

REFERENCE COMMITTEE NO. 4

Grand Republic Room

W. N. Richardson, M.D., Cadiz, Chairman
Walter R. Brewer, M.D., Lexington
T. J. Ferriell, Jr., M.D., Elizabethtown
Robert K. Johnson, M.D., Covington
James P. Moss, M.D., Louisville

REFERENCE COMMITTEE NO. 5

Delta Queen Room

Danny M. Clark, M.D., Somerset, Chairman
W. E. Becknell, M.D., Manchester
Frank B. Radmacher, M.D., Louisville
Forest F. Shely, M.D., Campbellsville
Robert E. Smith, M.D., Covington

REFERENCE COMMITTEE NO. 6

Natchez Room

David L. Stewart, M.D., Louisville, Chairman
John M. Baird, M.D., Danville
Gary D. Givens, M.D., Central City
C. Nicholas Kavanaugh, M.D., Lexington
M. L. Peyton, M.D., West Liberty

OFFICIAL CALL

KMA Annual Meeting

To the officers and members of the component county medical societies of the Kentucky Medical Association.

Meeting Place

The Annual Meeting of KMA will convene on Tuesday, Wednesday and Thursday, September 23, 24 and 25, at the Bluegrass Convention Center, Louisville. The first general session will be called to order at 8:50 a.m., Tuesday.

The House of Delegates

The first regular session of the House of Delegates will convene at 9 a.m., Monday, September 22, in the Jeffersonian Room of Ramada Inn. The second regular business session will begin at 7 p.m. Wednesday, September 24, in the Banquet Area at Bluegrass Convention Center.

Registration

The registration desk will open outside the Jeffersonian Room of Ramada Inn at 8 a.m., Monday, September 22 and at 6 p.m., Wednesday, September 24 in Bluegrass Convention Center. It will be open outside the Technical Exhibit Hall of Bluegrass Convention Center from 8 a.m. to 5 p.m., Tuesday, Wednesday, and Thursday, September 23-25.

House to Elect New Officers During Annual Meeting

KMA Officers for the 1975-76 Associational year will be elected by the House of Delegates at the close of its final session Wednesday evening, September 24. Officers to be selected this year are:

President-Elect	**(Elected from State at Large)**	**One Year**
Vice President	**(Elected from State at Large)**	**One Year**
Secretary	***(S. Randolph Scheen, Louisville)**	**Three Years**
Treasurer	***(Keith P. Smith, Corbin)**	**Three Years**
Delegates to AMA	***(Fred C. Rainey, Elizabethtown)**	**Two Years**
	***(David B. Stevens, Lexington)**	**Two Years**
Alternate Delegates	***(William W. Hall, Owensboro)**	**Two Years**
	***(Thomas L. Heavern, Jr., Highland Heights)**	**Two Years**

***Incumbent**

The AMA Delegates and Alternates from KMA are to be elected for two-year terms, from January 1, 1976, to December 31, 1977.

ELECTIONS

Election of Trustees and Alternate Trustees

The House of Delegates will elect five District Trustees and five Alternate Trustees at its second regular session, Wednesday, September 24. Nominations will be made by the Delegates from the electing Districts at a meeting following the first session of the House on Monday, September 22.

The Nominating Committee will report at the close of the first scientific session on Tuesday, September 23. Further nominations may be made from the floor at the final session of the House on Wednesday evening, September 24. All nominations are considered and acted upon by the Delegates at this final session.

Districts electing Trustees for three-year terms are: FIFTH DISTRICT (incumbent, Edward N. Maxwell, M.D., Louisville); SIXTH DISTRICT (incumbent, Paul J. Parks, M.D., Bowling Green); EIGHTH DISTRICT (incumbent, Richard J. Menke, M.D., Covington); ELEVENTH DISTRICT (incumbent, R. Eugene Bowling, M.D., Richmond); FIFTEENTH DISTRICT (incumbent, Harold L. Bushey, M.D., Barbourville).

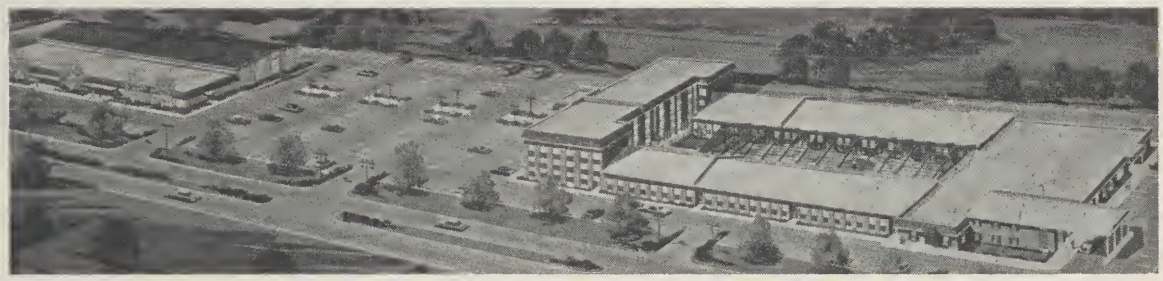
Districts electing Alternate Trustees are the same as those electing Trustees. Incumbents are Lloyd G. Yopp, M.D., Louisville (5th); Carlisle V. Dodson, M.D., Russellville (6th); Robert C. Smith, M.D., Newport (8th); Joseph M. Bush, M.D., Mt. Sterling (11th); and W. H. Stepchuck, M.D., Harlan (15th).

Trustees and Alternate Trustees of the 8th, 11th, and 15th Districts are eligible for re-election, while both the Trustee and the Alternate Trustee from the 6th District have served two full terms and are not eligible for re-election. In the 5th District, the Trustee is eligible for re-election but the Alternate Trustee is not eligible.

Annual Meeting Special Features

SCIENTIFIC SESSIONS, featuring many timely medical topics and nationally recognized speakers, are scheduled on September 23, 24 and 25 at the Bluegrass Convention Center, located at I-64 and Hurstbourne Lane in Louisville. "Sexual Performance," "Cancer—Detection and Therapy," "Sports Medicine," and "Gut—Issues and Answers" are themes for the four general sessions. In-depth presentations and discussion periods make the KMA Annual Meeting an outstanding vehicle for continuing medical education.

THE PRESIDENT'S LUNCHEON will feature Theodore Cooper, M.D., Ph.D., of Washington, D.C., as guest speaker. Doctor Cooper is the Assistant Secretary for Health with the Department of Health, Education and Welfare. The Luncheon will be held at 11:50 a.m., Wednesday, September 24 in the Banquet Area of the Bluegrass Convention Center. Other highlights of the Luncheon include presentations of KMA's awards and installation of the 1975-76 President of the Association, David A. Hull, M.D.



Bluegrass Convention Center Ramada Inn
Louisville, Kentucky

THE HOUSE OF DELEGATES, KMA's top policy-making body, will meet twice during this year's Annual Meeting. The first session of the House will be held at 9 a.m., Monday, September 22, in the Jeffersonian Room at Ramada Inn. The final session will be held in the Bluegrass Convention Center on Wednesday, September 24 at 7 p.m. Officers for the 1975-76 Associational year will be elected at the final session.

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SEVENTEEN SPECIALTY GROUPS will hold meetings on the afternoons of September 23 and 25. Meetings will begin at 1:30 p.m. this year and will be held in the Bluegrass Convention Center. No general sessions are scheduled for those afternoons and all KMA members are invited to attend any of the specialty group meetings.

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SCIENTIFIC AND TECHNICAL EXHIBITS will display the latest in medical products, services and techniques at the Bluegrass Convention Center during the 1975 Annual Meeting. Members and guests will have the opportunity to view products of interest at the 30-minute intermissions scheduled during each general and specialty group session.

ALUMNI REUNIONS will be held again this year for the five-year classes of the University of Louisville School of Medicine. Information regarding these reunions may be obtained by contacting the Chairman of the specific year listed elsewhere in this *Journal* or may be picked up at the registration desk during the Annual Meeting.

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THE WOMAN'S AUXILIARY TO KMA will hold its 53rd Annual Convention, September 22-24 at the Ramada Inn. Various activities have been planned and are featured on the Woman's Auxiliary page in this issue.

MAKE YOUR RESERVATIONS NOW

It is important that you begin making your room reservations as soon as possible for the KMA Annual Meeting, September 23-25. The Ramada Inn at I-64 and Hurstbourne Lane will be the Headquarters Hotel, however there are several other accommodations within easy reach of Ramada Inn and the Bluegrass Convention Center. In making your reservations, remember the first House of Delegates meeting will be Monday, September 22.

KEMPAC RECEPTION—DINNER—SEMINAR



Governor Julian M. Carroll
Democratic Candidate

Monday, September 22, 1975

6:00 p.m., EDT

Banquet Area

Bluegrass Convention Center

featuring

Kentucky's Candidates

for

Governor



Robert E. Gable
Republican Candidate

The KEMPAC Board of Directors invites you to make plans to attend the Annual KEMPAC Political Seminar and Banquet. Carl Cooper, M.D., Board Chairman, urges you to get your tickets early. Tickets are $12.50 per person; checks should be made payable to KEMPAC. Reservations should be sent to KEMPAC, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

1975 Annual Meeting To Honor Past President Jos. Marvin

The 1975 Annual Meeting of the Kentucky Medical Association will be officially entitled "The Joseph B. Marvin Memorial Meeting" in remembrance of the 1895 President of the Association.



The tradition of honoring a past president of KMA or some distinguished physician each year at the Annual Meeting originated in 1935.

Eugene H. Conner, M.D., Louisville, KMA Historian, has written a biography on Doctor Marvin for the Annual Meeting program booklet, which will be distributed at the meeting in Louisville, September 23-25.

1975 KMA Annual Meeting Gets Continuing Education Credit

The American Academy of Family Physicians has given approval for 15 1/2 hours of prescribed credit for this year's Annual Meeting.

Credit may also be obtained on an hour for hour basis toward Category I of the Physician's Recognition Award from the American Medical Association.

Number To Use for Messages To Be 491-1929

A Message Center will be set up once again during the 1975 Annual Meeting where you may be reached in case of an emergency or for routine messages. The number is (502) 491-1929.

Staffed at all times during the meeting, the Message Center will be located in the center of the Technical Exhibit Hall (Booth No. 51) at the Bluegrass Convention Center. Paging of individual physicians is not possible due to the arrangement of facilities for the meeting.

Only emergency calls will be posted on blackboards in the entrance lobby of Bluegrass Convention Center and in the Scientific Assembly Hall. All other messages will be kept on file at the Message Center until they are called for. It is requested that physicians check at the Message Center often for any messages.

It will be possible to locate other physicians attending the meeting by asking the Message Center to keep your message for pick-up.

The phone number at the Headquarters Hotel, Ramada Inn, is (502) 491-4830. You may be reached during the meetings of the House of Delegates by calling that number. Your name will be posted on a blackboard at the front of the room when you receive a call.

You are urged to make use of the Message Center. Be sure to leave these phone numbers at your home, office and hospital.

1975 Annual Meeting Program Summary

The Kentucky Medical Association

September 21, 22, 23, 24 and 25

Bluegrass Convention Center/Ramada Inn

Louisville

SUNDAY, SEPTEMBER 21

12:30 p.m. Luncheon Meeting, KMA Board of Trustees ..... Grand Republic Room, Convention Center

MONDAY, SEPTEMBER 22

9:00 a.m. First Meeting, KMA House of Delegates ..... Jeffersonian Room, Ramada Inn
12:30 p.m. Luncheon, Reference Committee Chairmen ..... Majestic Room, Convention Center
2:00 p.m. Reference Committee Meetings ..... Island Queen-Idlewild Rooms, Cincinnati Room, Eclipse Room, Grand Republic Room, Delta Queen Room, Natchez Room, Convention Center
6:00 p.m. KEMPAC Reception, Banquet and Seminar ..... Banquet Area, Convention Center

TUESDAY, SEPTEMBER 23

8:00 a.m. Registration ..... Lobby, Convention Center
8:50 a.m. Opening Ceremonies ..... Scientific Assembly Hall, Convention Center
9:00 a.m. First Scientific Session ..... Scientific Assembly Hall, Convention Center
12:00 noon Luncheon Meeting, Executive Committee and Reference Committee Chairmen ..... Suite 1172, Ramada Inn
1:30 p.m. Specialty Group Sessions, Convention Center (Nine Specialty Group sessions will be held simultaneously at this time. Their programs begin on page 448).
5:30 p.m. Reception honoring David A. Hull, M.D. and Mrs. Wally O. Montgomery ..... Poolside, Ramada Inn

WEDNESDAY, SEPTEMBER 24

9:00 a.m. Second Scientific Session ..... Scientific Assembly Hall, Convention Center
11:50 a.m. President's Luncheon ..... Banquet Area, Convention Center
2:00 p.m. Third Scientific Session ..... Scientific Assembly Hall, Convention Center
4:00 p.m. Board of Trustees Meeting and Dinner (6 p.m.) ..... Grand Republic Room, Convention Center
7:00 p.m. Second Meeting, KMA House of Delegates ..... Banquet Area, Convention Center

THURSDAY, SEPTEMBER 25

9:00 a.m. Fourth Scientific Session ..... Scientific Assembly Hall, Convention Center
12:30 p.m. Luncheon Meeting, Board of Trustees ..... Jeffersonian Room, Ramada Inn
1:30 p.m. Specialty Group Sessions, Convention Center (Eight Specialty Groups will meet simultaneously at this time. Their programs begin on page 451.)

A 30-minute intermission has been scheduled during each morning and afternoon Scientific Session for visiting Scientific and Technical Exhibits

(Full Scientific Program begins on next page)

The Kentucky Medical Association
SCIENTIFIC PROGRAM
Joseph B. Marvin Memorial Meeting
Bluegrass Convention Center, Louisville

TUESDAY, SEPTEMBER 23

MORNING SESSION
General Session

Hoyt D. Gardner, M.D., Louisville
KMA President, Presiding

8:50 **Opening Ceremonies**

Theme: "SEXUAL PERFORMANCE"

9:00 **"Care of the Rape Victim in the Emergency Department"**
John T. Rogers, M.D., Orchard Lake, Mich.

9:20 **"Sexual Performance After Urological Operations"**
Raymond G. Bunge, M.D., Iowa City, Iowa

9:40 **"Sexual Performance: Fact and Fiction"**
Bernard L. Cinberg, M.D., New York, N.Y.

10:10 **Intermission to Visit Exhibits**

10:40 **"Resuscitation and Management of the Dying Patient"**
Terring W. Heironimus, III, M.D., Charlottesville, Va.

11:00 **"Bad Sores and Other Mortifications"**
M. J. Jurkiewicz, M.D., Atlanta, Ga.

11:20 **"Clinical-Radiological Correlations in a Group of Interesting Pediatric Problems"**
William S. Davis, M.D., Denver, Colo.

AFTERNOON SESSION
Nine Specialty Group Meetings

(Nine specialty groups will have simultaneous scientific programs beginning at 1:30 p.m. No general sessions will be held at this time. Specialty group program outlines follow at the end of the main program on page 448.)

WEDNESDAY, SEPTEMBER 24

MORNING SESSION
General Session

Laszlo Makk, M.D., Louisville
KMA Vice-President, Presiding

Theme: "CANCER—DETECTION AND THERAPY"

9:00 **"A Case for Early Diagnosis of Lung Cancer"**
Tom R. DeMeester, M.D., Chicago, Ill.

JOHN T. ROGERS, M.D.
Orchard Lake, Michigan



Director, Emergency Department, St. Mary Hospital, Livonia, Michigan. M.D., 1947, Cornell University Medical College. Fellow, American College of Surgeons and American College of Obstetricians and Gynecologists. Founder and former Board member, American College of Emergency Physicians. First honorary life member, ACEP.

RAYMOND G. BUNGE, M.D.
Iowa City, Iowa



Professor in Urology, University of Iowa College of Medicine. M.D., 1936, University of Michigan Medical School. Diplomate, American Board of Urology. Member, American Association of Genito-Urinary Surgeons, American Tissue Culture Association, Society for Experimental Biology and Medicine and American Urological Association.

BERNARD L. CINBERG, M.D.
New York, New York



Private practice, Obstetrics and Gynecology. M.D., 1929, Columbia University College of Physicians and Surgeons. Residency taken at Royal Elizabeth University in Hungary. Associate, Attending and Consultant Physician at numerous New York hospitals. Member, American College of Obstetrics and Gynecology.

TERRING W. HEIRONIMUS, III, M.D.
Charlottesville, Virginia



Professor of Anesthesiology, University of Virginia Hospital. M.D., 1955, University of Virginia. Fellow, American College of Chest Physicians and American College of Anesthesiologists. Member, American Society of Anesthesiologists and American Thoracic Society. Author of numerous articles dealing with ventilatory care.

MAURICE J. JURKIEWICZ, M.D., D.D.S.
Atlanta, Georgia



Professor of Surgery and Chief, Division of Plastic and Reconstructive Surgery, Emory University School of Medicine. M.D., 1952, Harvard University. D.D.S., 1946, University of Maryland. Member, Board of Directors, Educational Foundation, American Society of Plastic and Reconstructive Surgeons. Associate Editor, Journal of Plastic and Reconstructive Surgery.

WILLIAM S. DAVIS, M.D.
Denver, Colorado



Director of Radiology, Denver Children's Hospital. Associate Professor of Radiology and Pediatrics, University of Colorado School of Medicine. M.D., 1943, Vanderbilt University School of Medicine. Member, American Academy of Pediatrics, Rocky Mountain Pediatric Society, American College of Radiology and American Society of Pediatric Radiology.

TOM R. DeMEESTER, M.D.
Chicago, Illinois



Assistant Professor, Department of Surgery, and Chief, Section of Thoracic and Vascular Surgery, University of Chicago School of Medicine. M.D., 1963, University of Michigan School of Medicine. Fellow, American College of Surgeons and American College of Chest Physicians. Member, Committee on Issues, Association for Academic Surgery.

9:20 "Steroid Receptors in Breast Cancer: Biological Function and Potential Therapeutic Significance"
William Mitchell, M.D., Nashville, Tenn.

9:40 "Angiosarcoma of the Liver"
Maurice Johnson, M.D., Akron, Ohio

10:00 Intermission to Visit Exhibits

10:30 "The Role of Immunology in the Early Detection of Cancer"
Loren J. Humphrey, M.D., Kansas City, Kan.

10:50 "Detection of Pelvic Malignancy"
Robert E. Rogers, M.D., Indianapolis, Ind.

11:10 "Acute Leukemia of Children, Current Progress and Future Needs"
Alvin M. Mauer, M.D., Memphis, Tenn.

PRESIDENT'S LUNCHEON

Banquet Area, Bluegrass Convention Center
11:50 a.m.

Hoyt D. Gardner, M.D., Louisville
KMA President, Presiding

Invocation
Recognition
Awards Presentation

Richard F. Grise, M.D., Bowling Green, Chairman
KMA Awards Committee

Luncheon Speaker

Theodore Cooper, M.D., Ph.D., Washington, D.C.
Assistant Secretary for Health,
Department of Health, Education and Welfare

Installation of the New KMA President

AFTERNOON SESSION
General Session

Gabe A. Payne, M.D., Hopkinsville
Chairman, KMA Scientific Program Committee
Presiding

Theme: "SPORTS MEDICINE"

2:00 "Management of Injuries to Athletes"
Don H. O'Donoghue, M.D., Oklahoma City, Okla.

2:20 "Otolaryngologic Sports Injuries"
Myron W. Lockey, M.D., Jackson, Miss.

2:40 "Dermatologic Problems in Athletics"
Sigfrid A. Muller, M.D., Rochester, Minn.

3:00 Intermission to Visit Exhibits

3:30 "A Critical Look at Physical Education"
Melvin Lee Thornton, M.D., San Antonio, Tex.

3:50 "Neurosurgical Aspects of Sports Injuries"
Christopher B. Shields, M.D., Louisville

4:10 Topic To Be Announced
George W. Ballou, M.D., Cincinnati, Ohio

4:40 "Oral and Maxillofacial Injuries"
Theodore E. Logan, Jr., D.M.D., Louisville

THURSDAY, SEPTEMBER 25

MORNING SESSION
General Session

Edward N. Maxwell, M.D., Louisville
Vice-Chairman, KMA Board of Trustees, Presiding

Theme: "GUT—ISSUES AND ANSWERS"

9:00 **"The Diagnosis and Treatment of Common Intestinal Parasites—Current Concepts"**
Joseph A. Burke, M.D., Lexington

9:20 **"The Liver and the Pill"**
E. Truman Mays, M.D., Lexington

9:40 **"The Liver—Problems and Solutions"**
John T. Galambos, M.D., Atlanta, Ga.

10:00 **Intermission to Visit Exhibits**

10:30 **"Etiology of Gastrointestinal Bleeding"**
G. Dewey Dunn, M.D., Nashville, Tenn.

10:50 **"Psychosomatic Aspects of GI Complaints"**
Barry Blackwell, M.D., Cincinnati, Ohio

11:10 **"The Radiologist—Still Not the Dinosaur in GI Diagnosis"**
Jerome F. Wiot, M.D., Cincinnati, Ohio

11:30 **"Therapeutic and Diagnostic Colonoscopy: Advantages and Limitations"**
Carl O. Knutson, M.D., Louisville

AFTERNOON SESSION
Eight Specialty Group Meetings

(Simultaneous scientific programs of eight specialty groups will be held at 1:30 p.m. All KMA members are invited and no general sessions will be held this afternoon. Groups meeting on Thursday afternoon are listed along with their individual programs beginning on page 451.)

SPECIALTY GROUP SESSIONS
TUESDAY, SEPTEMBER 23

Afternoon Session

Kentucky Society of Anesthesiologists
Natchez Room

To Be Announced

Kentucky Chapter,
American College of Chest Physicians
New Orleans-Island Queen-Idlewild Rooms

1:30 **"Patterns of Esophageal Reflux Associated with Pulmonary Aspiration"**
Tom R. DeMeester, M.D., Chicago, Ill.

2:30 **Intermission to Visit Exhibits**

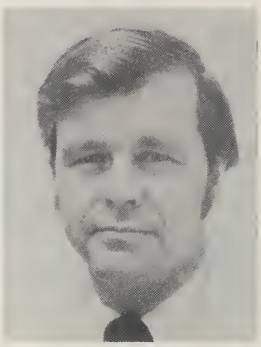
3:00 *Simultaneous Round Table Conferences*

"Psychological Aspects of Pulmonary Disease"
Clifford C. Kuhn, M.D., Louisville

"Tuberculosis and Fungal Disease"
Paul A. Pichardo, M.D., Lexington

"Aspiration Pneumonitis"
Tom R. DeMeester, M.D., Chicago, Ill.

WILLIAM M. MITCHELL, M.D., Ph.D.
Nashville, Tennessee



Associate Professor, Department of Pathology, Vanderbilt University School of Medicine. M.D., 1960, Vanderbilt University. Ph.D., 1966, Johns Hopkins University. Research Associate Director, Vanderbilt Cancer Research and Treatment Center. Research Career Development Award (NIAMD), 1972-1977. Member, American Society of Biological Chemists and American Association for Advancement of Science.

MAURICE N. JOHNSON, M.D.
Akron, Ohio



Director of Environmental Health, B. F. Goodrich Company. M.D., 1946, University of Minnesota Medical School. Member, American Academy of Occupational Medicine and Industrial Medical Association.

LOREN J. HUMPHREY, M.D., Ph.D.
Kansas City, Kansas



Professor and Chairman of Surgery, University of Kansas Medical Center. M.D., 1956, University of Illinois School of Medicine. Ph.D., 1967, State University of New York. Fellow, American College of Surgeons. Member, Society of University Surgeons, The Transplantation Society, Association of Cancer Educators, American Association for Cancer Research and National Cancer Plan Ad Hoc Committee on Planning.

ROBERT E. ROGERS, M.D.
Indianapolis, Indiana



Professor of Obstetrics and Gynecology, Indiana University School of Medicine. M.D., 1957, University of Miami School of Medicine. Fellow, American College of Obstetricians and Gynecologists, American Fertility Society and American College of Surgeons. Member, Society of Gynecologists Oncologists and Society Military Surgeons. Chairman, American College of Obstetricians and Gynecologic Practices Committee.

ALVIN M. MAUER, M.D.
Memphis, Tennessee



Professor of Pediatrics, University of Tennessee and Medical Director, St. Jude Children's Hospital. M.D., 1953, State University of Iowa College of Medicine. Member, American Association for Cancer Education, American Pediatric Society, American Academy of Pediatrics, American Society for Clinical Investigation and American Society of Hematology.

MYRON W. LOCKEY, M.D.
Jackson, Mississippi



Associate Professor, Division of Otolaryngology, University of Mississippi School of Medicine. M.D., 1961, University of Mississippi. Fellow, American College of Surgeons, American Society of Head and Neck Surgery. Associate Editor, Journal of the Mississippi State Medical Association. Member, American Academy of Ophthalmology and Otolaryngology. Past President, Mississippi EEN&T Society.

DON H. O'DONOGHUE, M.D.
Oklahoma City, Oklahoma



Professor Emeritus of Orthopaedic Surgery, University of Oklahoma School of Medicine. M.D., 1926, University of Iowa Medical School. Chairman, Governor's Board of Trustees University Hospital. Founding member and 1st President, American Orthopaedic Society for Sports Medicine. Past President, American Orthopaedic Association. Editorial Board member, Sports Medical Journal, Clinical Orthopaedics.

SIGFRID A. MULLER, M.D.
Rochester, Minnesota



Professor of Dermatology, Mayo Medical School. M.D., 1953, St. Louis University School of Medicine. Member, American Academy of Dermatology, Society for Investigative Dermatology, American Dermatologic Association, American Society of Dermatopathology. Past President, Society of Dermatologic Genetics. Editorial Consultant, Medicina Cutanea.

"Cardiac Arrythmia Associated with Pulmonary Disease"
Armond T. Gordon, M.D., Louisville
"Exercise and Coronary Artery Disease"
Russell G. McAllister, Jr., M.D., Lexington
"Nursing and the Patient with Pulmonary Disease"
Mrs. Shirley Bowlds, R.N., Louisville
Mrs. Patricia Martin, R.N.B.S.N., Louisville

Kentucky Chapter, American College of Emergency Physicians
Eclipse Room

1:30 **"OB-GYN Emergencies"**
John T. Rogers, M.D., Orchard Lake, Mich.
2:30 **Intermission to Visit Exhibits**
3:00 **Business Meeting and Election of Officers**

Kentucky Society of Pathologists
Cincinnati Room

1:30 **"Tumor Viruses"**
William Mitchell, M.D., Nashville, Tenn.
2:15 **"Cyclic AMP in Tumor Cells"**
William Mitchell, M.D., Nashville, Tenn.
3:00 **Intermission to Visit Exhibits**
3:30 **Business Meeting**

Kentucky Chapter, American Academy of Pediatrics
Assembly Hall

1:30 **"Non-Alveolar Causes of Respiratory Distress in the Neonatal Period"**
William S. Davis, M.D., Denver, Colo.
2:00 **"Pediatric Concerns for the Pre-Adolescent Athlete"**
Melvin Lee Thornton, M.D., San Antonio, Texas
2:15 **Discussion**
2:45 **Intermission to Visit Exhibits**
3:15 **"Solid Tumors in Children: Current Approaches"**
Alvin M. Mauer, M.D., Memphis, Tenn.
4:00 **Discussion**
4:30 **Business Meeting**

Kentucky Society for Plastic and Reconstructive Surgery
Majestic Room

1:30 **"Head and Neck Surgery"**
M. J. Jurkiewicz, M.D., Atlanta, Ga.
1:45 **"Secondary Cleft Lip Repair with Transposition Flap"**
Ross Musgrave, M.D., Pittsburgh, Pa.
2:00 **"Medical Liability for Plastic Surgeons—1975"**
Rex Peterson, M.D., Phoenix, Ariz.
2:15 **"Nevus Sebaceum, A Premalignant Lesion"**
Tom D. Nichol, D.D.S., M.D., Louisville
2:30 **Intermission to Visit Exhibits**
3:00 **"Inflatable vs. Gel-filled Mammary Prosthesis—A Comparison"**
Raleigh R. Archer, M.D., Lexington
3:10 **"Office Surgery—Pro's and Con's"**
Norman M. Cole, M.D., Louisville
3:20 **"Pectoral Muscle Flap and Subcutaneous Mastectomy"**
Lisle Wayne, II, M.D., Madisonville

3:30 **"Techniques and Problems in Otoplasty, Both Cosmetic and Reconstructive"**
John C. Weeter, M.D., Louisville

3:40 **"Cardiac Monitoring"**
Morton L. Kasdan, M.D., Louisville

3:50 **"Laryngotracheal Disruption"**
Larry D. Florman, M.D., Louisville

4:00 **"Nevoid Basal Cell Syndrome"**
J. Thomas Giannini, M.D., Louisville

4:10 **"Traumatic Scrotal Avulsion"**
Thomas W. Hagan, M.D., Louisville

4:20 **Business Meeting**

Kentucky Orthopaedic Society
Louisville and Kentucky Rooms
(Ramada Inn)

1:30 **"Surgical Techniques for Repair of Knee Ligament Injuries"**
Don H. O'Donoghue, M.D., Oklahoma City, Okla.

2:00 **"Low Risk Anesthesia (Regional) for Trauma to the Extremities"**
William K. Massie, M.D., Lexington

2:15 **"Intravenous Lidocaine Anesthesia for Closed Treatment of Fractures and Dislocations of the Upper Extremities"**
Martin Schiller, M.D., Louisville

2:30 **Intermission to Visit Exhibits**

3:00 **"Problem Total Hips"**
Ernest A. Eggers, M.D., Louisville

3:30 **"Pes Transfer: Its Clinical Application"**
Raymond G. Shea, M.D., Louisville

Kentucky Chapter,
American College of Surgeons
Grand Republic Room

1:30 **"Colon Volvulus"**
Frederick D. Nemer, M.D., Lexington

1:50 **"Morbidity and Mortality of Mandibular Surgery for Malignant Disease"**
Michael B. Flynn, M.D., Louisville

2:10 **"Operative Angiography"**
Jack L. Hamman, M.D., Madisonville

2:30 **Intermission to Visit Exhibits**

3:00 **"Sources of Morbidity and Mortality of Pancreatic Injury"**
Richard Heitsch, M.D., Louisville
Calvin E. Jones, M.D., Louisville

3:15 **"Present Trends in Chemotherapy"**
Loren J. Humphrey, M.D., Kansas City, Kan.

4:00 **"Management of Complicated Tracheal Problems"**
Joseph R. Utley, M.D., Lexington

Kentucky Urological Association
Delta Queen Room

1:30 **"Intersexuality"**
Raymond G. Bunge, M.D., Iowa City, Iowa

2:30 **Intermission to Visit Exhibits**

3:00 **Pyelogram Hour**

3:30 **Business Meeting**

MELVIN L. THORNTON, M.D.
San Antonio, Texas



Clinical Professor of Pediatrics, University of Texas Medical School. M.D., 1946, University of Texas Medical Branch. Chairman, Committee on Pediatric Aspects of Physical Fitness, Recreation and Sports, American Academy of Pediatrics. Chairman, AMA Medical Aspects of Sports Committee. Member, Youth Committee of the American Academy of Pediatrics.

CHRISTOPHER B. SHIELDS, M.D.
Louisville, Kentucky



Assistant Professor of Neurological Surgery, University of Louisville. M.D., 1966, University of Toronto. Fellowship in neurosurgery, Royal College of Surgeons of Canada. Member, American Association of Neurosurgeons and Congress of Neurological Surgeons.

GEORGE W. BALLOU, M.D.
Cincinnati, Ohio



General Surgeon practicing in Cincinnati. M.D., 1947, University of Louisville School of Medicine. Team physician for Cincinnati Reds baseball team since 1953 and for Cincinnati Bengals football team since 1968. Member, American College of Surgeons and American Society of Abdominal Surgeons.

THEODORE E. LOGAN, JR., D.M.D.
Louisville, Kentucky



Private practice limited to Oral Surgery. D.M.D., 1971, University of Louisville School of Dentistry. Part-time instructor, Department of Oral Surgery, University of Louisville. Member, Southeastern Society of Oral Surgeons, Kentucky Society of Oral and Maxillofacial Surgeons and American Dental Society of Anesthesiology.

JOSEPH A. BURKE, M.D.
Lexington, Kentucky



Assistant Professor of Pediatrics, University of Kentucky. M.D., 1964, Georgetown University School of Medicine. Member, Southern Society for Pediatric Research and American Academy of Pediatrics. Author of several articles and presentations dealing with the mammalian intestinal tract and viral hepatitis.

E. TRUMAN MAYS, M.D.
Lexington, Kentucky

Professor of Surgery, University of Kentucky. M.D., 1958, University of Louisville. Chief, Surgical Service, Veterans Administration Hospital. Chairman, KMA Committee on Emergency Medical Care. Member, American Association for the Surgery of Trauma, University Association for Emergency Medical Services, American College of Surgeons. Former project director for Emergency Medical Services in Louisville.



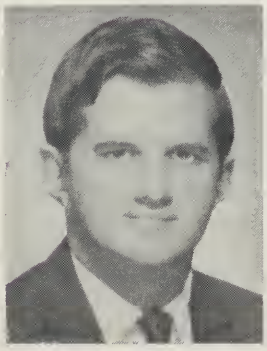
JOHN T. GALAMBOS, M.D.
Atlanta, Georgia



Professor of Medicine and Head, Division of Gastroenterology, Emory University School of Medicine. M.D., 1952, Emory University. Fellow, American College of Physicians. Trustee, American College of Gastroenterology. Member, American Association for the Study of Liver Diseases, Southern Society for Clinical Investigation, Gastroenterology Research Group and Royal Society of Medicine.

G. DEWEY DUNN, M.D.
Nashville, Tennessee

Assistant Professor of Medicine, Vanderbilt University School of Medicine. M.D., 1960, Louisiana State University School of Medicine. Diplomate, American Board of Internal Medicine. Fellow, American College of Physicians. Member, American Society for Gastrointestinal Endoscopy, American Gastroenterological Association, American Association for the Study of Liver Diseases and American Federation for Clinical Research.



SPECIALTY GROUP SESSIONS

THURSDAY, SEPTEMBER 25

AFTERNOON SESSION

Kentucky Dermatological Society
General Hospital

1:30 **Clinical Case Presentations**
Daniel F. Richfield, M.D., Covington, Moderator

3:00 **General Discussion of Cases Presented**
Sigfrid A. Muller, M.D., Rochester, Minn.

Kentucky ENT Society
Natchez Room

1:30 **"Management of Facial Fractures"**
Myron W. Lockey, M.D., Jackson, Miss.

2:30 **Intermission to Visit Exhibits**

3:00 **"Treatment of Tracheal Stenosis"**
Myron W. Lockey, M.D., Jackson, Miss.

4:00 **Business Meeting**

Kentucky Chapter,
American Academy of Family Physicians
Majestic-New Orleans Rooms

1:30 **"Management of Cirrhosis"**
John T. Galambos, M.D., Atlanta, Ga.

2:30 **Intermission to Visit Exhibits**

3:00 **"Dilemma in the Management of Patients with Functional Gastrointestinal Disease"**
Samuel H. Cheng, M.D., Louisville

Kentucky Neurosurgical Society
Delta Queen Room

1:30 **"Percutaneous Cordotomy and Trigeminal Rhizotomy"**
Richard K. Jelsma, M.D., Louisville
"Experience with Transaxial Computerized Tomography (EMI Scanning)"
Richard H. Mortara, M.D., Lexington

3:00 **Intermission to Visit Exhibits**

3:30 **"Superficial Temporal-Middle Cerebral Arterial Anastomoses"**
Russell Travis, M.D., Lexington
"Transphenoidal Hypophysectomy"
James S. Warson, M.D., Lexington
"Chemonucleolysis"
Christopher B. Shields, M.D., Louisville

Kentucky Obstetrical and
Gynecologic Society
Island Queen-Idlewild Rooms

James B. Cox, M.D., Presiding

12:00 **Luncheon (Ramada Inn)**

1:30 **"Hypertension in Pregnancy"**
Luella Klein, M.D., Atlanta, Ga.

2:15 **"Benign Cystic Teratoma"**
Robert E. Rogers, M.D., Indianapolis, Ind.

3:00 **Intermission to Visit Exhibits**

3:30 *Prematurity Panel Discussion*

"Obstetrical Aspects of Prematurity"
Robert Shier, M.D., Lexington

"Pediatric Aspects of Prematurity"
M. Douglas Cunningham, M.D., Lexington

Kentucky Occupational Medical Association
Cincinnati Room

1:30 **"Increased Responsibility of the Physician as a Result of OSHA"**
Maurice Johnson, M.D., Akron, Ohio

2:00 **"Implications of New Kentucky Noise Standards for Practicing Physicians"**
J. Bradford Block, M.D., Frankfort

2:30 **Intermission to Visit Exhibits**

Kentucky Chapter, American College of Physicians
Grand Republic Room

Franklin B. Moosnick, M.D., Lexington, Presiding

1:30 **"Hairy-Cell Leukemia"**
Ellis A. Fuller, M.D., Louisville

1:50 **"Echocardiography: Role in Evaluation of Coronary Artery Disease"**
Dennis B. Kelly, M.D., Lexington
Jamie J. Jacobs, M.D., Lexington

2:10 **"Present Status of Treatment for Breast Cancer"**
John Gockerman, M.D., Lexington

2:30 **Intermission to Visit Exhibits**

3:00 **"Vascular Disorders of the Gut"**
G. Dewey Dunn, M.D., Nashville, Tenn.

3:20 **"Significance of the HL-A-W27 Antigens in Clinical Disease States"**
Ronald J. Saykaly, M.D., Lexington

3:40 **"Hepatitis Antigenemia"**
William Max Schreiber, M.D., Louisville

Kentucky Psychiatric Association
General Assembly Hall

1:30 **"A New Treatment Model for Psychosomatic Disorders"**
Barry Blackwell, M.D., Cincinnati, Ohio

2:30 **Intermission to Visit Exhibits**

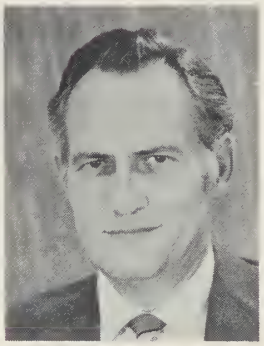
3:00 **Business Meeting**
Hugh A. Storrow, M.D., Lexington, Presiding

BARRY BLACKWELL, M.D.
Cincinnati, Ohio



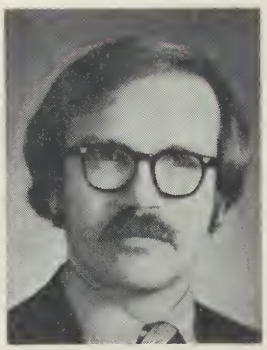
Professor of Psychiatry and Associate Professor of Pharmacology, University of Cincinnati. M.D., 1966, Cambridge University. M.B., B.Chir., Guy's Hospital, London. Member, Society for Neuroscience, Society for Biological Psychiatry, American Society for Clinical Pharmacology and Therapeutics, American Psychiatric Association, American College of Neuropsychopharmacology. Foundation member, Royal College of Psychiatrists.

JEROME F. WIOT, M.D.
Cincinnati, Ohio



Professor and Chairman, Department of Radiology, University of Cincinnati. M.D., 1953, University of Cincinnati. Diplomate, American Board of Radiology. Member, Radiological Society of North America, American Roentgen Ray Society, Society of Gastrointestinal Radiologists. Author of approximately 40 papers dealing with various aspects of diagnostic radiology.

CARL O. KNUTSON, M.D.
Louisville, Kentucky



Associate Professor of Surgery, University of Louisville. M.D., 1965, University of Michigan. Diplomate, American Board of Surgery. Chief, Surgical Endoscopy, UL. Fellow, American College of Surgeons. Member, Association for Academic Surgeons, Society of Head and Neck Surgeons, American Association for Cancer Education. Co-investigator in 1973, American Cancer Society Breast Cancer Screening Project.

REGISTRATION INFORMATION

A registration booth will be located at the entrance to the Technical Exhibit Hall of the Bluegrass Convention Center throughout the Annual Meeting. The booth will open at 8 a.m., Tuesday, Wednesday and Thursday, September 23-25.

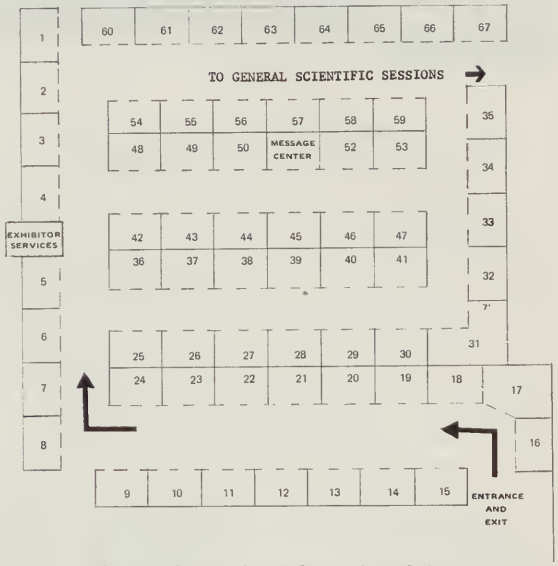
Please register and wear your badge at all times while attending the meeting.

Latest Research Advances in Products and Services Offered by 1975 Technical Exhibits

The technical exhibits at the 1975 KMA Annual Meeting will feature the latest developments in medical techniques and information. Located in the Bluegrass Convention Center, the exhibits will condense a volume of information and ideas in such a manner that a vast amount of knowledge can be secured in a short period of time.

Prepared carefully and skillfully to appeal to you, the physician, the exhibits are especially geared to your special interests as a practitioner. Medical representatives and other exhibitors will be on hand to discuss personally their products and services with you. Both you and your patients should benefit from the information that can be gained from a visit to the Technical Exhibits.

Thirty-minute intermissions have been planned during each general and specialty group session so that every physician may take advantage of this excellent opportunity provided by the exhibits.



Floor Plan of Technical Exhibits

1975 TECHNICAL EXHIBITORS

Abbott Laboratories (24)
Ames Company (22)
Arnar-Stone Laboratories, Inc. (66)
Associated Master Services, Inc. (38)
Ayerst Laboratories (2)
Blue Cross and Blue Shield of Kentucky (15)
Boehringer Ingelheim Ltd. (58)
Burroughs Wellcome Company (67)
Central Pharmacal Company (34)
CIBA Pharmaceutical Company (12)
Connecticut Mutual Life Insurance Company (29)
Cooper Laboratories, Inc. (41)
Coulter Electronics, Inc. (39)
Crocker-Fels Company (35)
Dairy Council of the Mid South, Inc. (61)
Dictaphone Corporation (26)
Dolbey and Company (57)
Eaton Laboratories (18)
Encyclopaedia Britannica (4)
Gates Stockler & Lenz (49)
General Medical Louisville (65)
Gerber Products Company (64)
Glencoe Research (52)
Guild of Rx Opticians of Kentucky (23)
John Hancock Life Insurance Company (9)
Hoechst-Roussel Pharmaceuticals (10)
International Clinical Laboratories of Kentucky (56)
Ives Laboratories (50)
Lang Company (11)
Lederle Laboratories (45)
A. P. Lee Agency (13)
Eli Lilly and Company (8)
J. B. Lippincott Company (19)
Lorillard (47)
Louisville Medical Laboratory (37)
Malkin Instrument Company (42)
Mallinckrodt (43)
Marion Laboratories (33)
Mead Johnson Laboratories (25)
Medical Protective Company (5)
Metropolitan—Medicare (1)
Meyer Laboratories (55)
Mitchell Orthopedic Supply (27 & 28)
Mutual Benefit Life Insurance Company (3)
National Life Insurance Company of Vermont (44)
Ortho Pharmaceutical Corporation (16)
Parke, Davis and Company (7)
Pathology and Cytology Laboratories (30)
Pfizer Labs (14)
William P. Poythress and Company (6)
Professional Accounting Systems (31)
Paul Revere Insurance Company (32)
R. J. Reynolds Tobacco Company (40)
A. H. Robins Company (59)
Roche Laboratories (48)
Ross Laboratories (60)
Sandoz Pharmaceuticals (21)
W. B. Saunders Company (62)
Clayton L. Scroggins Associates (63)
Searle Laboratories (36)
Sheryl Pharmaceuticals (53)
Spectrum Anesthesia Services (46)
E. R. Squibb and Sons (20)
Stuart Pharmaceuticals (54)
Zimmer Kloenne of Kentucky (17)

ORGANIZATION SECTION

AMA Delegates Increase Dues, Elect Palmer As President

The AMA House of Delegates at its 124th Annual Convention, held June 14-19 in Atlantic City, acted on over 240 items of business. Elected to serve as AMA President for 1976-77 was Richard E. Palmer, M.D., Alexandria, Va.

The House, in increasing annual dues to $250, called for AMA to take immediate action to help ease the malpractice crisis, including the formation of an AMA-sponsored professional liability reinsurance company.

In his inaugural address, Max H. Parrott, M.D., said a reorganization of the AMA at its top level is necessary if the Association is to achieve its goal of maintaining the high quality of medical care. The new AMA President called for abolishment of the offices of president, vice-president, president-elect and immediate past president.

William R. Willard, M.D., a former dean of the University of Kentucky College of Medicine, received AMA's highest honor, the Distinguished Service Award. He is currently the dean of the College of Community Health Sciences at the University of Alabama.

UL Newborn Symposium Set For November 13-14

The Department of Pediatrics, University of Louisville School of Medicine, will present the Ninth Annual Newborn Symposium, November 13-14, 1975, to be held at the Health Sciences Center Auditorium, Louisville.

Participants in the two-day event will be: Doctors David Clark, Frederick C. Battaglia, Henry Garrettson, Reba Hill, Richard Naeye, John Nelson, Leo Stern and members of the Department of Pediatrics, University of Louisville School of Medicine. Doctor Clark will deliver the 1975 Eleventh Annual Louisville Pediatric Lecture on November 12.

For further information write: Billy F. Andrews, M.D., 200 E. Chestnut, Department of Pediatrics, Louisville, Kentucky 40202.

KMGA Schedules Golf Tournament for September 25

The Kentucky Medical Golf Association will hold its annual fall tournament on Thursday, September 25 at the Audubon Country Club in Louisville.

Assessment for the tournament is $15, which includes green fees, a buffet in the evening and drinks. Carts will be at the expense of the individual.

Physicians may tee off at any time on that date and may make up their own game or find one at the course. Any physician interested in playing in the fall tournament should complete the following form:

APPLICATION

To: Kentucky Medical Golf Association
John M. Karibo, M.D.
2120 Newburg Road, Suite 305
Louisville, Kentucky 40205

Date _____

Gentlemen:

Enclosed is my check in the amount of $15 to cover assessment for the 1975 Golf Tournament. (Make check payable to Kentucky Medical Golf Association.)

Name _____ M.D. Club Affiliation _____

Address _____ Current Handicap _____

Zip Code

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Each tablet also contains aspirin gr 3½, phenacetin gr 2½, caffeine gr ½.

U.L. Alumni Reunions Planned During KMA Annual Meeting

Ten classes of the University of Louisville School of Medicine are planning reunions for alumni. The reunions are scheduled to be held during the KMA Annual Meeting, September 23-25.

Chairmen of the five-year classes are listed below. Information regarding the reunions may be obtained from the chairmen or the UL Alumni Office, 636-4151.

1925—Arthur T. Hurst, M.D., 3337 Medical Arts Building, Louisville, 458-3259.
1930—Richard R. Slucher, M.D., 7908 Wolf Pen Branch Road, Prospect, 228-1858.
1935—Mary V. Franz, M.D., 6201 Glen Hill Road, Louisville, 425-6025.
1940—Edwin P. Scott, M.D., 400 Cornell Place, Louisville, 895-5401.
1945—Armond T. Gordon, M.D., 746 Lincoln Federal Building, Louisville, 587-8493.
1950—Hoyt D. Gardner, M.D., 508 Watterson City Building, Louisville, 452-2684.
1955—Nettie G. King, M.D., Jewish Hospital, Louisville, 587-4321.
1960—Everett Bickers, M.D., Box 5, Floyd Knobs, Indiana, 944-6497.
1965—Robert A. Noel, M.D., 3612 Lexington Road, Louisville, 897-1871.
1970—John L. Cowan, M.D., Louisville General Hospital, Louisville, 589-4321.

Barry S. Smith, M.D., Louisville, has been appointed staff physiatrist of the Institute of Physical Medicine and Rehabilitation. He comes to Louisville from the Naval Regional Medical Center in Portsmouth, Va., where he was the chief of physical medicine.

WANTED: HEALTH OFFICER

Health Officer wanted for Floyd County (4/5) and Martin County (1/5) in Eastern Kentucky. If interested contact:

James B. Goble, Administrator,

Floyd County Health Department,

Prestonsburg, Kentucky 41653

Call (606) 886-2788

Letters To The Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

Harley, et al, reports of Helminth Parasites of Dogs from Kentucky (from *Journal of KMA*, June, 1975, p. 331) were apropos in spite of the lack of reports of visceral larva migrans. In the past five or six years, I have had seven cases of pneumonitis with eosinophilia who also had elevated gamma globulin and hemagglutins, and anti-A and/or anti-B. The latter is consistent with a presumptive diagnosis of V.L.M. Biopsies were not done. All recovered with supportive measures and did not recur; the last two received thiabendazole.

William F. Schnitzker, M.D.
1200 Bath Avenue
Ashland, Kentucky 41101

In Memoriam

PAT RYAN IMES, M.D.
Louisville
1906-1975

Pat R. Imes, M.D., died on July 14 at the age of 69. He was Professor Emeritus of Surgery at the University of Louisville, where he taught for 35 years. A 1928 graduate of the U of L Medical School, he was a past President of the Kentucky Surgical Society and a Fellow of the American College of Surgeons. He also belonged to the Louisville Innominate Society.

The MUDRANES

Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

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the sun and solar keratosis...

Over-exposed



and often underdiagnosed

Solar keratosis is not an uncommon medical problem.

Of course, the prevalence of keratotic lesions is greater in locations south of the 38th parallel—the so-called "Solar Keratosis Belt"—receiving the greatest amounts of solar radiation. However, solar keratosis can occur among any light-skinned population, usually in persons over 40, wherever people are subject to extended exposure to the sun.

Solar keratoses are generally not difficult to identify.

These skin lesions are usually multiple, flat or slightly elevated, brownish or red in color, papular, dry, rough, adherent and sharply defined. They are found on areas of the skin having extensive exposure to sunlight. Clinical characteristics of the lesions, their predominant location on exposed surfaces, the age of the patient and his skin type are important considerations in the diagnosis.

Solar keratoses can, and should, be treated because they are potentially premalignant.

Chronic exposure to sunlight frequently leads to degenerative changes in the skin. This can often result in the development of multiple, potentially premalignant keratotic lesions. Therefore, early detection and treatment is advisable.

Treatment with Efudex (fluorouracil) provides a high degree of effectiveness with a low recurrence rate, ease and convenience of therapy, low incidence of scarring, excellent cosmetic results in most cases, and a high level of patient acceptability.

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Because there may be more than meets the eye.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris (hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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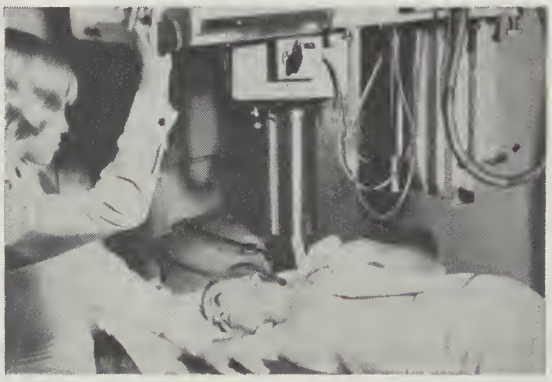
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Case history for patient photographed at left on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

Breast Cancer- earlier warning system

Futility and frustration beset the physician confronted with breast cancer. For the last 35 years, the survival rate has not significantly changed despite intensive educational programs aimed at earlier detection, and improvement in treatment techniques.

What is the outlook? We know the key to reducing mortality from breast cancer is in the *earliest possible* diagnosis. The stage at which breast cancer is detected is *crucial* to the outcome of treatment. By the time a lump is discovered through BSE or clinical examination, critical time may have been lost.



Mammography



Thermography

And we *do* have the means to achieve earlier diagnosis. We do have an *earlier* warning system. Mammography and thermography can detect breast cancer *before* a lump is discernible by palpation. To demonstrate that it is practical and feasible to detect breast cancer earlier by using these modalities, the American Cancer Society and the National Cancer Institute are funding a network of breast cancer demonstration projects. Supported by grants of $2-million from the ACS and $4-million from the NCI, 20 such centers are expected to be operative across the country by the end of the year. Each will screen at no charge, approximately 5,000 women annually, in what is considered to be the ideal detection program—to include clinical examination, mammography and thermography. Each of these detection methods contributes independently to the detection of breast cancer, and none can be dispensed with in the search for early disease.

At present we cannot prevent breast cancer, but the potential for saving more lives is immense. The five-year survival rate surges dramatically from 53% when axillary nodes are positive, to approximately 85% when the disease is localized, to nearly 100% for in-situ cancer.

We have an earlier warning system. Let's use it.

® american cancer society

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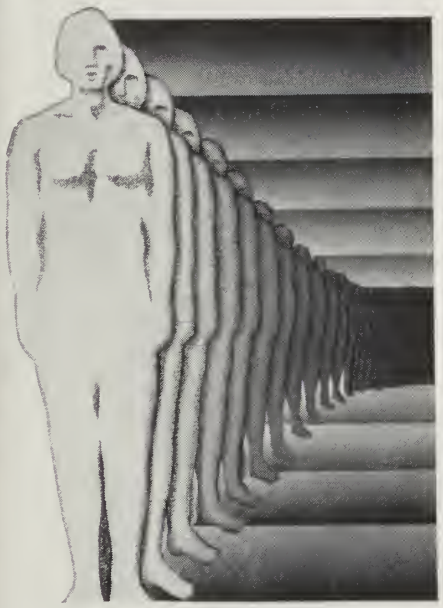
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Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 to 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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chlordiazepoxide HCl/Roche
5 mg, 10 mg, 25 mg capsules

IN PAINFUL ACUTE CYSTITIS*

*nonobstructed; due to susceptible organisms



RELIEVE THE PAIN

WHILE YOU ELIMINATE THE PATHOGENS.

FOR THE PAIN

☐ **Early relief of painful symptoms** such as burning and pain associated with urgency and frequency.

FOR THE PATHOGENS

☐ **Effective control of susceptible pathogens** such as *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris.*

Appropriate antibacterial therapy: Up to 3 days therapy with Azo Gantrisin 4 to 6 tablets *Stat.*, then 2 tablets *q.i.d.*; then 11 days with Gantrisin (sulfisoxazole) may be considered.

AZO GANTRISIN®

(50 mg phenazopyridine HCl and 0.5 Gm sulfisoxazole)

Before prescribing, please consult complete product information, a summary of which follows.

Indications: In adults, urinary tract infections complicated by pain (primarily cystitis, pyelitis and pyelonephritis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. *Important Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents including the sulfonamides. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established. Teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infections is 4 to 6 tablets initially, then 2 tablets four times daily for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment of the infection with Gantrisin (sulfisoxazole) may be considered.

Note: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after ingestion.

How Supplied: Tablets, each containing 0.5 Gm sulfisoxazole and 50 mg phenazopyridine HCl —bottles of 100 and 500.

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OF MEDICINE

The Journal of The KENTUCKY Medical Association

Giardiasis: A Common Cause of Chronic Diarrhea
Joseph A. Burke, M.D. 479

Fiber Optic Bronchoscopy in Infants and Children: Advances and Clinical Usage
Juda Z. Jona, M.D. and Robert P. Belin, M.D. 485

Frontier Nursing Service, 1925-1975
James B. Holloway, Jr., M.D. 491

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1975 KMA ANNUAL MEETING
September 23-25
Ramada Inn/Bluegrass Convention Center
Louisville

VOLUME 73 SEPTEMBER 1975 NUMBER 9

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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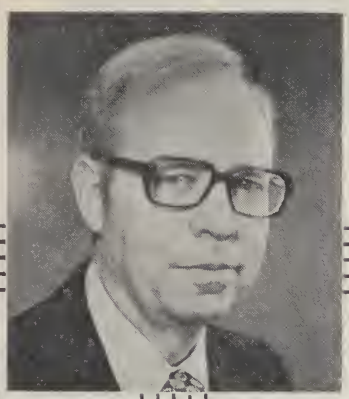
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MESSAGE FROM THE PRESIDENT



By Quiet Waters

EACH destination has its trail. We have together transversed this year's byways and highways of the Kentucky Medical Association. From the dark abysses of frustration to the delicious nectar of success we have journeyed.

Such undertakings of mass activities are done by conglomerate colleagues—together. In no way can such productivity be achieved by the solitary trudging of a lonely striver.

There unceasingly will be needs to satisfy—always problems challenging lives—goals for fulfillment—and man's insatiable dissatisfaction with life's natural processes. These prologues beseech consensus and bring together demands and inventions. Organizations and our KMA are inventions necessitated by these stimuli. Evolving from such a process are people and things to do.

Since we are people and there have been the never ending plethora of things to do we have all culminated together for this year's journey. It's astonishing the members who give so much, so willingly in behalf of us all.

We, in mutual avenues and manifestations, have labored and borne the crop—sheared the sheep and now bring the ship to shore.

My deepest respect and undivided thanks go to all the many colleagues, men and women, who have been both glue of adhesion and thrust of progress in this waterfall of cascading events.

Our superlative staff, our good right arms, are to be forever praised.

To those who sat and waited with Job's endurance, my love.

Every year now is a watershed. Apathy will destroy all our patients, our country, our organizations. Inertness and stillness, because of incorrect priority assignment, are lethal, but at the same time vulnerable enemies. If quality health care, at a price all can afford, is to continue, everyone and each of us individually must be in the fray. Leadership cannot do it all for all of us. The grassroots who are the final sum and substance must each and every day be a positive force and sustainer.

And now by still waters. This profession, my beloved life's work, has made so much possible that I feel inadequate to ever repay it in anything like full measure. My pledge forever is to continue to be available whenever leadership feels it has a task that can be applied to me—any call or proposal so assigned shall have my best.

To have the opportunity of service that you of Kentucky Medicine have allowed swells me with bursting pride. A proudness that will be forever held in an ocean of rippling and rolling thanks of a never ending surf that flows from my heart.

May the sun always shine upon you—may the wind be ever at your back—and may you be in heaven three days before the devil knows you're dead.

God Bless.

Hoyt Gardner

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

SEPTEMBER

17 "Drug Interactions,"** Health Sciences Center, University of Louisville, Louisville

21 Alumni Day,** Health Sciences Center, University of Louisville, Louisville

22 1975 John I. Perlstein Memorial Lecture, "Treatment of Acute Lymphocytic Leukemia in Children," UL Health Sciences Center, Louisville

23-25 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

26-28 "Scientific Foundations for Clinical Practice,"* Fee: $45, UK Medical Center, Lexington

OCTOBER

3-4 Fall Scientific Conference, Kentucky Thoracic Society, Sheraton Inn-South, Lexington

15-16 "Newer Concepts in Allergy and Immunology,"** Health Sciences Center, University of Louisville, Louisville

29 "Thromboembolis Disease—Investigation and Management,"** St. Anthony Hospital, Louisville

30-Nov. 1 11th Annual Bronson Course in Diagnostic Ophthalmic Ultrasound,** Health Sciences Center, University of Louisville, Louisville

NOVEMBER

3-4 "Endometrial Carcinoma and Its Treatment," American Cancer Society, Kentucky Division. Twenty-five outstanding national and international speakers. Galt House, Louisville. For registration write: Laman A. Gray, Sr., M.D., Children's Foundation Building, 601 South Floyd Street, Louisville 40202.

8-9 KAFP Seminar, Jenny Wiley State Park, Prestonsburg

13-14 11th Annual Symposium on Central Nervous System in the Newborn, Health Sciences Center, University of Louisville, Louisville

For further information, contact: Frank R. Lemon, M.D., Associate Dean of Extra-Mural Affairs, UK College of Medicine, Lexington 40506

**For further information, contact: Gerald D. Swim, Director, Office of Continuing Education, UL School of Medicine, Louisville 40202*

IN SURROUNDING STATES

OCTOBER

6-9 American Academy of Family Physicians, Palmer House, Chicago

7-12 Society for Clinical & Experimental Hypnosis Annual Scientific Program & Workshops, Center for Continuing Education, University of Chicago

10 Postgraduate course, "Medical Technology," Cleveland Clinic Educational Foundation, Cleveland

13-17 Clinical Congress of the American College of Surgeons, Fairmont Hotel, San Francisco

13-17 "Preventive Internal Medicine," American College of Physicians Postgraduate Course, University of Tennessee Department of Medicine, Memphis

20-21 Tennessee Valley Medical Assembly, Read House, Chattanooga

23 Postgraduate course, "Dermatology for the Dermatopathologist and Pathologist," Cleveland Clinic Educational Foundation, Cleveland

24-25 Tennessee/Kentucky Regional Meeting, American College of Physicians, Hyatt Regency, Nashville. For information: Gerald Plitman, M.D., 180 Waring Road, Memphis, Tennessee 38117.

26-30 Annual Scientific Assembly, American College of Chest Physicians, Anaheim Convention Center, Anaheim

NOVEMBER

3-7 "Current Concepts in Pediatric Radiology," sponsored by Duke University Medical Center; Pinehurst Hotel, Pinehurst, N.C.

13-15 "The Critically Injured Patient: Emergency Surgical and Medical Care," sponsored by the American College of Surgeons and Case Western Reserve Medical School; Marriott Inn, Cleveland, O.

16-19 Annual Scientific Meeting, Southern Medical Association, Miami Beach, Fla.

29-Dec. 4 AMA Clinical Convention, Honolulu

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CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

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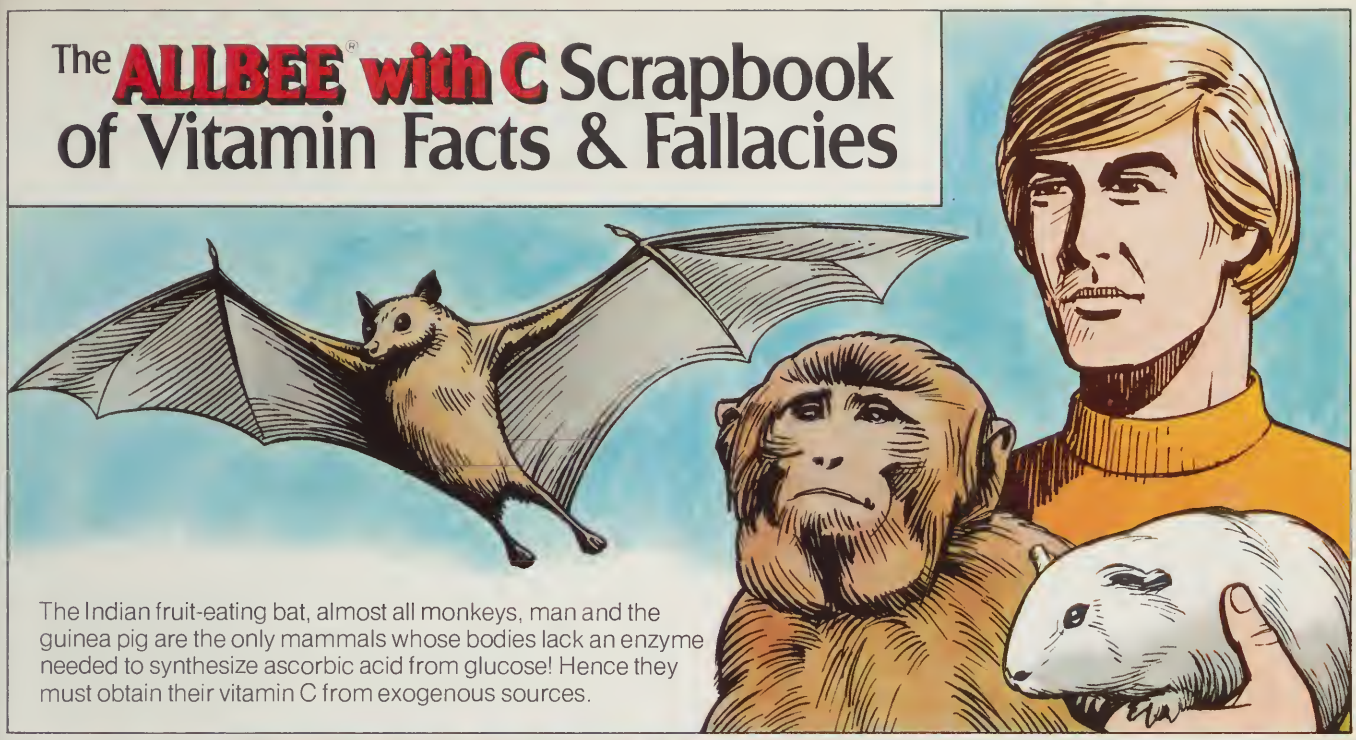
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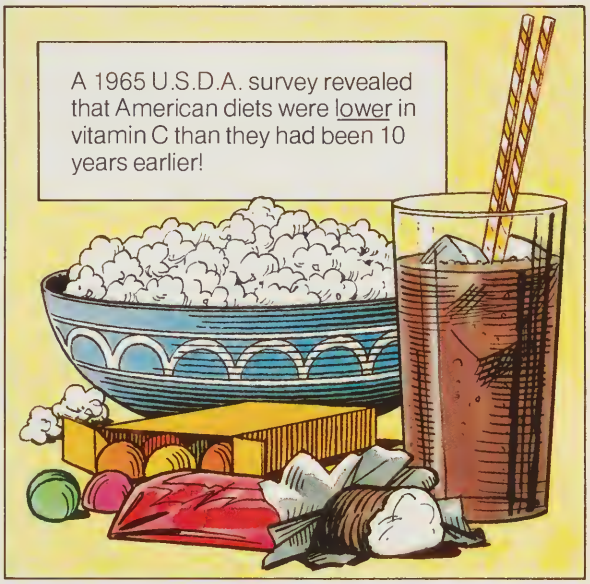


The Indian fruit-eating bat, almost all monkeys, man and the guinea pig are the only mammals whose bodies lack an enzyme needed to synthesize ascorbic acid from glucose! Hence they must obtain their vitamin C from exogenous sources.



De Joinville writing about a 13th century crusade reported that barber surgeons had to "cut away the dead flesh from the gums to enable people to masticate their food." The disease he described was probably scurvy.

A 1965 U.S.D.A. survey revealed that American diets were lower in vitamin C than they had been 10 years earlier!





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Brief summary. Adverse Reactions: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Contraindications: Glaucoma; renal or hepatic disease; obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); or hypersensitivity to any of the ingredients.

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1975 FALL SCIENTIFIC CONFERENCE

on

"Pulmonary Disease"

OCTOBER 3-4

Sheraton Inn-South — Lexington, Kentucky

FRIDAY, OCTOBER 3

SCIENTIFIC SESSION I

Moderator
Larry L. Drummond, Coordinator
Respiratory Therapy Program
Jefferson Community College

1:00 p.m. **"Oxygen Therapy and Toxicity"**
**Eugene D. Robin, M.D., Department of Medicine, Stanford University School of Medicine, California*

1:45 p.m. **"Helping the Person with Chronic Pulmonary Disease Live More Independently"**
Joan Kauffman, R.N., Clinical Specialist, Veterans Administration Hospital, Lexington

2:05 p.m. **"Incidence and Correlates of Atelectasis in a Group of Surgical Patients"**
Dorothy Luther, Associate Professor of Nursing, University of Kentucky Medical Center

2:25 p.m. **"Effect of Two Ventilatory Methods after Pulmonary Artery Injection of Free Fatty Acid"**
John Hughey and Roger Rives, University of Louisville School of Medicine

3:15 p.m. **"A Three Year Experience with Diagnostic Virology in Children with Lower Respiratory Disease"**
Garrett Adams, M.D., Assistant Professor of Pediatrics and Microbiology, University of Louisville School of Medicine

3:35 p.m. **"Bronchial Asthma Syndrome Following a Severe Viral Infection"**
John A. Lloyd, M.D., Pulmonary Diseases, Louisville

3:55 p.m. **"Rifampin, The Pill and Pregnancy"**
Judah L. Skolnick, M.D.; Barry S. Stoler, M.D.; Donald Katz, M.D.; Marvin Yussman, M.D.; William H. Anderson, M.D., University of Louisville School of Medicine

4:10 p.m. **General Discussion**

4:30 p.m. **Business Meeting of KTS Membership**

6:30 p.m. **Social Hour and KTS Annual Dinner**
Speaker: Robert Schulman
Louisville Times Media Critic

**L. E. Smith Lecturer*

NOTE: All health professionals are invited to both sessions. Scientific Session I is primarily for paramedical personnel. Scientific Session II is primarily for physicians.

SATURDAY, OCTOBER 4

SCIENTIFIC SESSION II

Moderator
John A. Lloyd, M.D.
Program Chairman

8:30 a.m. **"Edema in the Lung"**
**Eugene D. Robin, M.D., Department of Medicine, Stanford University School of Medicine, California*

9:00 a.m. **"Significance of Multiple Simultaneous Tuberculin Testing in Diagnosing Mycobacterial Infections"**
Irene G. Melvin, Research Associate; H. Mac Vandiviere, M.D., Department of Community Medicine, University of Kentucky Medical Center

9:20 a.m. **"The Use of an Oral Progestational Agent in Hypercarbic COPD Patients"**
Warlito Bautista, M.D., Respiratory and Environmental Medicine Section, University of Louisville School of Medicine

9:40 a.m. **"Cytologic Examination of Pleural Effusions"**
C. F. Winkler, M.D.; C. F. Wolter, M.D.; L. T. Yam, M.D., Department of Medicine, University of Louisville School of Medicine

10:30 a.m. **"Angiotensin I and II in Patients with Acute Respiratory Insufficiency"**
William H. Anderson, M.D., Professor of Medicine, University of Louisville School of Medicine

10:50 a.m. **"Determinants of 'False Positive' and 'False Negative' Sputum Cytology"**
Stephen Jay, M.D.; Kenneth Wehr, M.D.; David Nicholson, M.D.; Pulmonary Division, Department of Medicine, University of Kentucky Medical Center

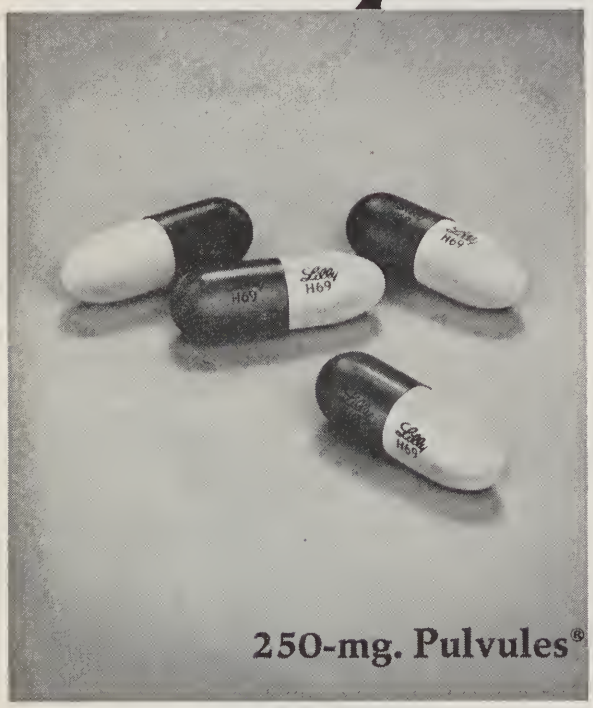
11:10 a.m. **"Histoplasmosis"**
M. L. Dillon, M.D.; E. W. Chick, M.D.; J. R. Utley, M.D.; E. P. Todd, M.D.; R. B. McElvein, M.D.; N. L. Goodman, Ph.D.; D. S. Bauman, Ph.D.; C. Smith, Dr. P.H., Department of Community Medicine, University of Kentucky Medical Center

11:30 a.m. **"Stump the Experts"**
Case Presentations from the Audience
Panel to be appointed

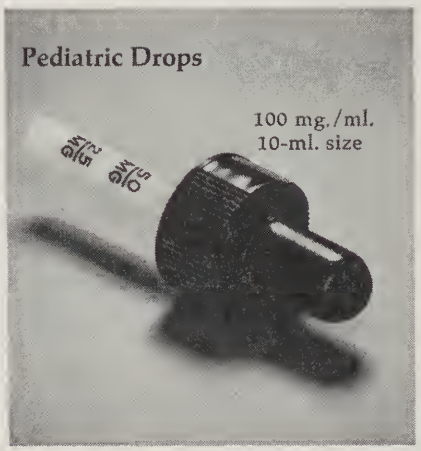
12:30 p.m. **Adjournment**

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VOLUME 73 SEPTEMBER 1975 No. 9

Giardiasis: A Common Cause of Chronic Diarrhea

JOSEPH A. BURKE, M.D.*

Lexington, Kentucky

Giardiasis is frequently encountered in Kentucky. It should be suspected in any patient with steatorrhea or chronic diarrhea, especially if associated with weight loss or growth failure. A correct diagnosis is important because giardiasis is curable.

THE flagellated protozoan *Giardia lamblia* was discovered by Antonj Van Leeuwenhoek in 1681.[1] The suggestion that infection with this parasite might cause symptoms was made by Lambl in 1859 after he observed the organism in stool from a child with diarrhea.[2] Because infestations with *Giardia lamblia* may cause no symptoms, its potential pathogenicity and clinical significance were previously the subject of much controversy.[3-9] However during the past decade, numerous reports of epidemics of gastrointestinal disease caused by *Giardia lamblia* have convincingly established its pathogenic potential. [10-14]

Giardiasis should be considered in any patient who presents with a malabsorption syndrome or chronic diarrhea, especially if associated with considerable weight loss.[15,16] An accurate diagnosis is important because the symptoms are reversible when the infection is eradicated by appropriate treatment.[9,17-19] However, giardiasis may be difficult to diagnose. Duodenal aspiration is often necessary because multiple stool examinations fail to demonstrate the organism in 50 per cent of symptomatic individuals.[19-21]

The purpose of this report is to direct attention to the easily overlooked problem of giardiasis. Four patients are described to illustrate important clinical, diagnostic or therapeutic points. The discussion reviews the life cycle of *Giardia lamblia* and the epidemiology, clinical features, diagnosis and treatment of giardiasis.

*Assistant Professor of Pediatrics, University of Kentucky College of Medicine, Lexington

Received at KMA: 5-15-75

Case Reports

Patient 1: A 24-year-old male medical student presented with a 12-day history of diarrhea. The stools were loose, malodorous and numbered 10 to 20 per day. The patient also noted anorexia, nausea, malaise, abdominal distention and a 4.5 kg weight loss. The symptoms began two weeks after his return from Colorado where he had been fishing in the mountains. While fishing, he obtained all drinking water from a well and several streams; it was neither halogenated nor boiled. There was no history of fever, chills or blood in the stools. The findings on physical examination were unremarkable. A stool culture was negative for enteric pathogens. One of two diarrheal stools contained trophozoites of *Giardia lamblia.*

The patient was treated with metronidazole, 250 mg four times per day for seven days. The diarrhea stopped two days after therapy was instituted and he has remained well since completion of therapy.

Comment: Giardiasis is one of several causes of traveler's diarrhea.[10-14,17] Its average incubation period is 15 days, though it may be as long as two months. Because of the long incubation period, symptoms often do not appear until late during a vacation or even after the traveler has returned home. Giardiasis may be encountered in domestic travelers or campers as well as in individuals returning from travel abroad.

Patient 2: A five-year-old boy was admitted to the hospital because of diarrhea of four months duration. The stools were liquid and numbered two to ten per day. He had lost 3 kg in weight. Anorexia, nausea, intermittent vomiting and a sense of satiety after the ingestion of small amounts of food were also noted. The physical examination was unremarkable. His abdomen was flat. The results of a complete blood count, sedimentation rate, barium enema and sweat chloride determination were all normal. A stool culture was negative for enteric pathogens. A stool specimen for ova and parasites showed *Giardia lamblia* cysts (Fig. 1).

The patient was treated with quinacrine hydrochloride (Atabrine), 100 mg two times daily for seven days. Within three days, there was complete disappearance of his symptoms. He remained asymptomatic and gained 1 kg during the ensuing month.



FIG. 1. Ovoid-shaped cyst from the stool of patient 2. Iron hematoxylin stain. Original magnification X 1000.

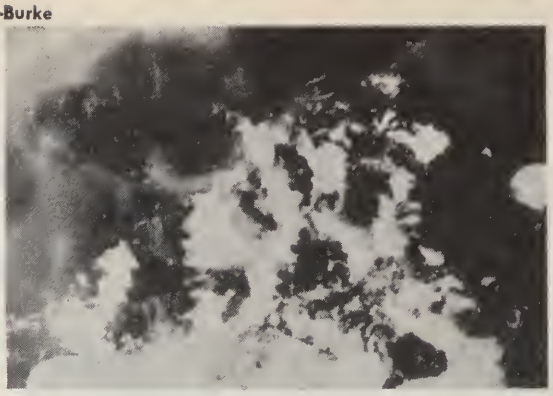


FIG. 2. Barium study of the small intestine of patient 3. The mucosal folds of the duodenum and proximal jejunum are thickened.

Comment: Chronic diarrhea and weight loss are the predominant symptoms in most patients with symptomatic giardiasis. As in this case, these symptoms are promptly reversed by appropriate therapy.

Patient 3: M.T. was hospitalized at 3-7/12 years of age with an eight-month history of anorexia, diarrhea, cramping abdominal pain, abdominal distention and lethargy. There was a 1.5 kg weight loss. Her stools were pale, frothy, voluminous and foul-smelling. She was placed on a gluten-free diet for two weeks preceding hospitalization. Her anorexia, abdominal pain, and vomiting improved on this diet but the diarrhea and abdominal distention persisted. She gained 1 kg in weight. She was hospitalized for an intestinal biopsy with a presumptive diagnosis of celiac disease due to gluten intolerance. On physical examination, the height and weight were both below the third percentile. She was irritable and had decreased subcutaneous tissue, generalized muscle wasting, a distended abdomen and hyperactive bowel sounds. An upper gastrointestinal radiologic examination demonstrated thickening of the mucosal folds of the duodenum and jejunum (Fig. 2). Three stool specimens were negative for ova and parasites. A jejunal biopsy showed a slight increase in numbers of chronic inflammatory cells in the lamina propria. There was no "villous atrophy". Duodenal aspirate, jejunal mucus (Fig. 3) and the biopsy contained trophozoites of *Giardia lamblia.*

The patient was placed on a regular diet and treated with metronidazole, 125 mg three times

daily for 10 days. The stools became normal within one week. She was asymptomatic three months later and had gained 2.2 kg in weight (Fig. 4).

Comment: Duodenal intubation was necessary to establish a diagnosis because repeated stool examinations were negative for *Giardia lamblia*. In addition, this case illustrates the fact that giardiasis can mimic celiac disease.[15] Partial improvement followed removal of gluten from the diet. In addition to clinical improvement following institution of a gluten-free diet, the diagnosis of celiac disease requires a small intestinal biopsy with evidence of "villous atrophy". An infection with *Giardia lamblia* should be ruled out in any patient with a celiac-like syndrome.

Patient 4: I.P., a Caucasian male, weighed 2550 gm at birth. He fed well during the neonatal period. At one month of age his weight was 3830 gm. At two months of age he developed anorexia, lethargy, abdominal distention, postprandial vomiting and diarrhea. The stools were pale, frothy, foul-smelling and liquid and numbered three to six per day. Because of a suspected allergy to one of the proteins in cow's milk, the formula was changed to a soybean preparation. The symptoms did not improve. He was referred to the University of Kentucky Medical Center at eight months of age because of intermittent vomiting, chronic diarrhea, abdominal distention and poor weight gain. On admission, he weighed 4415 gm (less than third percentile). He was irritable and had a protuberant abdomen, generalized muscle wasting and decreased subcutaneous tissue. The results of a complete blood count, sweat chloride determination and a lactose tolerance test were normal. A stool specimen contained cysts of *Giardia lamblia*. Radiologic examination of the upper gastrointestinal tract demonstrated thickening of the mucosal folds of the duodenum and jejunum.

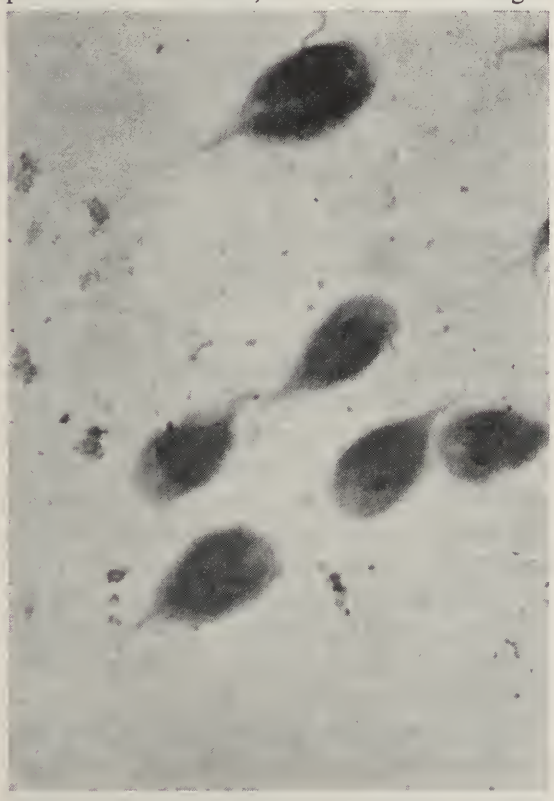


FIG. 3. Trophozoites in jejunal mucus obtained from patient 3. Giemsa stain. Original magnification X 1000.

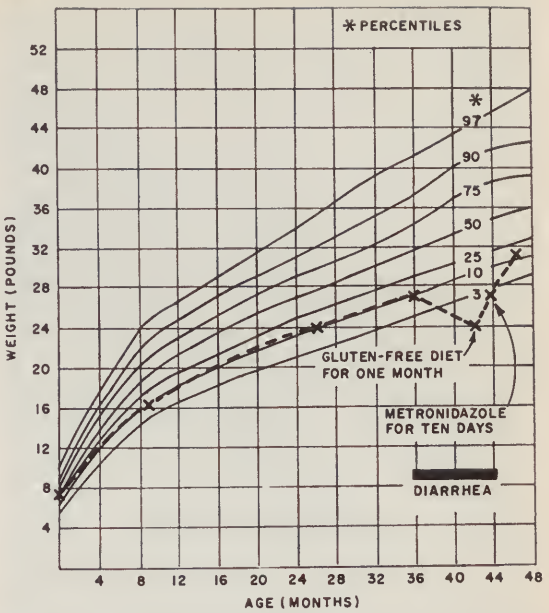


FIG. 4. Patient 3. Giardiasis presenting with a celiac-like syndrome. An incomplete remission followed institution of a gluten-free diet. The growth failure and chronic diarrhea were reversed by metronidazole therapy.

The child was placed on a regular diet and did not gain any weight during the first 11 days of hospitalization. He was then treated with atabrine, 2 mg/kg three times daily for seven days. He gained 1.6 kg in 12 days. When evaluated two weeks post-discharge, he was asymptomatic and had gained an additional 0.5 kg in weight (Fig. 5).

Comment: Prolonged growth failure and chronic diarrhea are prominent symptoms in many children with giardiasis.[3,19] As in this case, these problems are reversed by appropriate treatment.

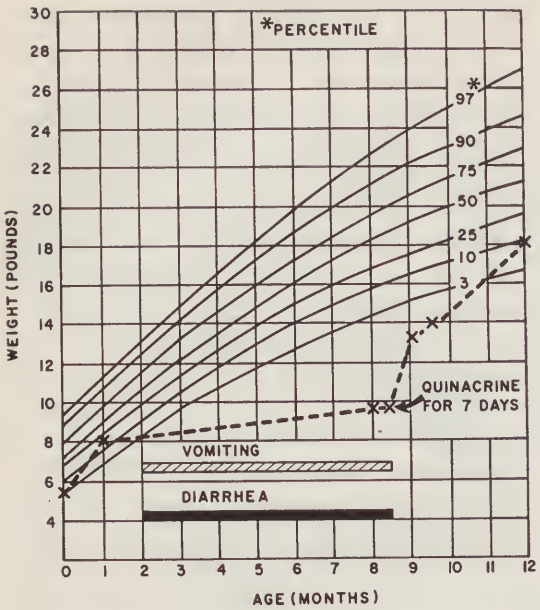


FIG. 5. Patient 4. The prolonged growth failure in this infant was promptly reversed by quinacrine therapy.

Discussion

Life Cycle: *Giardia lamblia* is a flagellated protozoan. It has both a trophozoite and cyst stage. In infected individuals, trophozoites live and multiply in the lumen of the duodenum and upper jejunum. The trophozoite is a pear-shaped organism, 11-18 microns in length and 6-9 microns in width. It has two prominent nuclei with central karyosomes and eight flagella (Fig. 6). An ovoid sucking disc occupies the anterior ventral surface. By applying this structure to the epithelial surface of the small intestine, the organism becomes firmly adherent and may resist peristalsis. With rare exceptions, the trophozoites reside in the intestinal lumen and do not invade the wall of the small intestine. The trophozoite does not survive outside the body and few are found in feces and only in diarrheal stools. In the absence of very rapid intestinal transit, encystation occurs as the trophozoites pass through the ileum and large intestine. The cysts are ovoid-shaped organisms, 8-12 microns in length and 6-10 microns in width. They contain two to four nuclei usually situated near one pole (Fig. 1). The cysts are rapidly inactivated in a dry environment but they remain viable for weeks in moist soil and for months in water.[22] When infective cysts are ingested, they pass unharmed through the stomach and undergo excystation into two daughter trophozoites in the duodenum.

Epidemiology: Man is the natural host and reservoir for *Giardia lamblia*. The organism has a worldwide distribution. Cysts may pass from an infected person to others by the direct fecal-oral route or in contaminated food or water. Drinking water contaminated with infected feces has been the suspected mode of spread in most epidemics.[10-14]

Pathogenesis: The pathogenesis of diarrhea and/or malabsorption in giardiasis is unknown. Explanations that have been proposed include: a mechanical barrier to absorption is created by massive numbers of parasites on the small intestinal mucosa; competition exists between the host and parasite for nutrients; a toxic product is liberated by the parasite which interferes with microvillar function or digestive enzyme activity; and mucosal dysfunction is secondary to tissue injury or invasion.[16] As yet none of these theories is supported by adequate evidence.

Clinical Features: Infestation with *Giardia lamblia* may cause no symptoms. However, if the infestation is heavy, the patient may develop a broad spectrum of clinical manifestations. Diarrhea is the commonest symptom and may be acute and self-limited, intermittent and relapsing, or chronic and continuous. In any patient with diarrhea of more than two weeks duration, especially if associated with considerable weight loss, giardiasis should be suspected. The stools are usually loose and malodorous, amd may be greasy, bulky and frothy. They frequently contain mucus but not pus or blood. Upper abdominal discomfort and distention are often reported, occasionally without diarrhea. Extreme lassitude is a common complaint. Other symptoms may include anorexia, nausea, vomiting, flatulence and abdominal bloating.[11] Children may present with a celiac-like syndrome characterized by anorexia, chronic diarrhea, retarded growth, generalized muscle wasting and a distended abdomen.[19,23]

Values for routine laboratory studies are usually normal.[24] Eosinophilia is uncommon.[7,22] Treatment reversible malabsorption of fat,[9,19] vitamin A,[25] glucose,[15] D-xylose,[15]

lactose,[15,20] folic acid[15] and vitamin B_{12}[26,27] has been demonstrated in some patients. Radiologic examination of the small intestine may show no abnormalities, but in some patients there is thickening of the mucosal folds in the duodenum and jejunum.[28,29] These changes revert to normal with eradication of the parasite.

Diagnosis: A diagnosis of giardiasis requires demonstration of *Giardia lamblia* in stool, duodenal or jejunal aspirate or mucus, or in a small intestinal biopsy specimen. Stool examination is the simplest diagnostic method. However, cysts or trophozoites of *Giardia lamblia* are not found in the stool of up to 50 per cent of symptomatic individuals. Because the organism may be shed intermittently, at least three stool specimens should be examined.[30] In a suspected case, if stools consistently give negative results, duodenal fluid or a jejunal biopsy should be evaluated. These examinations are more effective methods for detecting Giardia. Most cases will be detected if the results of a duodenal aspirate and multiple stool examinations are combined.[21] Occasionally a jejunal biopsy is necessary since the trophozoites on rare occasions may be found only in biopsy material.[15]

Treatment: Giardiasis is a self-limited disease in some individuals, but in others drug therapy is required. Metronidazole (Flagyl) and quinacrine hydrochloride (Atabrine) are equally effective for eradicating the parasite and eliminating the clinical signs and symptoms of giardiasis.[18,32-35] Quinacrine is taken orally for seven days in a dose of 8 mg/kg/day (maximum dose=300 mg/day). It is an acridine dye derivative and frequently stains the skin and sclera yellow. Other side effects include dermatitis, nausea, vomiting and abdominal cramps. Treatment with metronidazole is for 10 days as follows: adults, 250 mg TID; children: less than two years, 125 mg daily; two to four years, 125 mg BID; four to eight years, 125 mg TID; and over eight years, 250 mg BID or TID. Side effects from this drug are generally mild and include nausea, abdominal pain, dizziness, headache, paresthesias and leukopenia. Alcohol should not be consumed during treatment because in some patients it may precipitate attacks of abdominal pain, nausea, flushing and confusion. A single course of treatment with either drug may be followed by a relapse days to weeks after stopping therapy.[10] In such an event, a second course of treatment is recommended. The alternate drug may be used or the dose of metronidazole may be increased to three times the standard dose.[22]

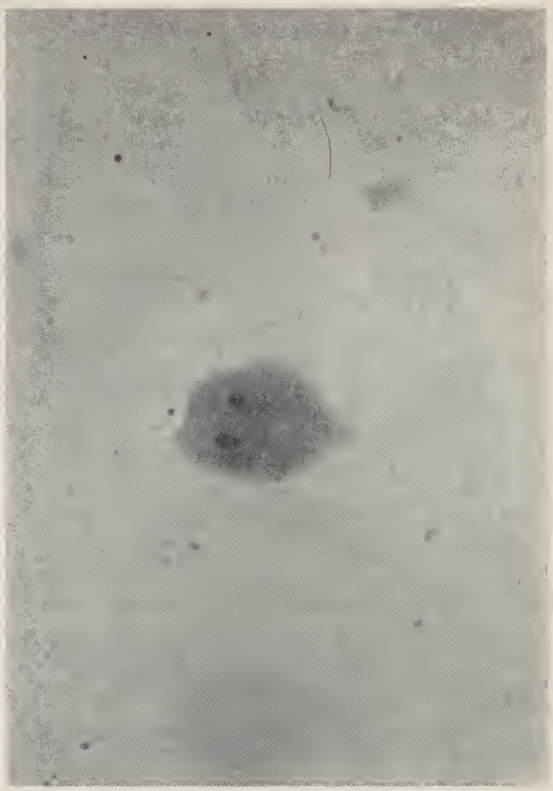


FIG. 6. Pear-shaped trophozoite of Giardia lamblia. Note the two prominent karyosomes and the flagella. Giemsa stain. Original magnification X 1000.

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Fiber Optic Bronchoscopy in Infants and Children: Advances and Clinical Usage

JUDA Z. JONA, M.D. AND ROBERT P. BELIN, M.D.*
Lexington, Kentucky

New developments in the fields of optics and illumination have heralded the introduction of improved and miniaturized endoscopic equipment for use in infants and children.[1]

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*Reprint requests to Juda Jona, M.D., Division of Pediatric Surgery, University of Kentucky College of Medicine, Lexington, Kentucky 40506.

Received at KMA: 2-25-75

Usage

These advanced instruments offer the pediatric surgeon wide range of diagnostic and therapeutic modalities. It must be remembered that endoscopy should not be attempted in infants and children without the aid of general anesthesia; less serious and even fatal complications result from lack of cooperation.

A. **Diagnostic Usages:** Congenital anomalies of the airway system may be obscure at times and physical and radiological examinations may not always provide the exact diagnosis. This is particularly true with the varieties of congenital tracheo-esophageal fistula (TEF), foremost of all the H-type fistula. Accurate bronchoscopy was found a most valuable tool in diagnosing these difficult lesions.[1-3] Vascular rings, airway stenosis and webs are among other congenital lesions which can be concisely identified and evaluated. This is also true in evaluating children with wheezing and symptoms of airway impedence. Periodic inspection of the airway in children with chronic bronchial infections (bronchiectasis) or laryngotracheopapillomatosis will permit concise assessment of the progress of the disease and the need for further medical or surgical interventions. Children with persisting emphysema or collapse of a pulmonary segment require careful bron-

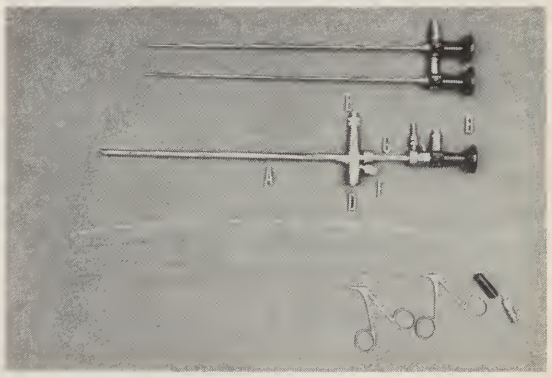


FIG. 1. The Carl Storz Pediatric Ventilation Bronchoscopic System.

choscopic evaluation for the presence of occult foreign body aspiration, intrinsic luminal lesion or extrinsic airway compression. Unrecognized and untreated they may lead to serious pulmonary destruction or increasing pulmonary insufficiency.

B. **Therapeutic Usages:** Paramount in this category is the capability of identifying and safely removing foreign objects lodged in the airway. This pertains, not only to aspirated solid objects, but also the accumulated viscid and purulent secretions causing "mucous plugs". When intrinsic obstruction of the passages exists (tumors, webs and stenosis), resection or dilatation through the bronchoscope may allay the obstructive component and, on occasions, avert the need for major pulmonary operation.

Foreign Body Aspiration

It is a frequent and a most serious matter in infants and children and will, therefore, deserve a special consideration. Children in the one to two years of age group are prone to aspiration because of the oral phase they go through. The small and critical airway diameter in these children causes frequent obstructive symptoms even with minimal inflammation and swelling. Therefore, the diagnosis of aspiration is often obvious and may be apparent even to the unsophisticated parent. The acute onset of paroxysm of cough, choking and occasional cyanosis is alarming and characteristic of aspiration. Not infrequently, the parents can report the nature of the aspirated object to the physician. Any suspicion of aspiration should be fully investigated. A detailed history is important in terms of previous pulmonary symptoms or pathology and especially in ascertaining the nature of the object aspirated. Physical examination, though frequently revealing, may be misleading or normal. Chest radiograms may demonstrate opaque objects, emphysema, collapse of a segment and deviation of the mediastinum or may remain normal. The patient who has a chronic cough and possibly secondary pulmonary changes may not have a distinct history of aspiration and a high degree of suspicion must be exercised by the physician in order to avoid missing the diagnosis. Residual or undiagnosed aspirated matter may cause grave sequalae. Partial obstruction of the airway may lead to emphysematous changes distal to that point, while complete obstruction may lead to atelectasis. Either way, pulmonary functions are reduced and the associated chronic cough and infection will lead to chronic debilitation. Local mucosal changes produced by chemical and bacterial injury, especially from vegetable matter, will interfere with proper bronchial secretions and will eventually produce bronchiectasis and/or pulmonary suppuration. The systemic effect of such infection may be serious and potentially lethal. It behooves the primary physician to determine the likelihood of aspiration and to subject such children to bronchoscopic examination even when the possibility of aspiration is only remote.

Summary

The introduction of fiber optic illumination along with improved telescopic lense systems has greatly advanced modern pediatric bronchoscopy. Intense illumination, magnifying telescopic system and antifogging devices coupled with miniaturization and the great ease of maintaining ventilation allow the pediatric surgeon to investigate effectively and safely even the smallest of infants. We have found that with well coordinated anesthesia safety prevails and untoward complications have not resulted. Therefore, it is recommended that unresolved airway symptoms, abnormal radiological changes or the suspicion of aspiration should be promptly investigated by means of bronchoscopy.

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GRAND ROUNDS

The University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Medical Conditions Resembling the Acute Surgical Abdomen*

A significant number of patients presenting with acute abdominal pain suffer from nonsurgical conditions. Hopefully, this paper will serve clinicians as another set of guideposts[1] to some of the more common of these medical abdominal crises.

Certain aspects in the history and physical examination should alert the clinician to the possibility of a nonsurgical abdomen: history of similar recurrent episodes, often going back to childhood; history of recurrent joint or pleuritic pain; unusual dermatologic complaints. In the present history, the clinician should be alert to systemic features accompanying the abdominal pain. Unusually high fever, chills or diarrhea are some of the systemic features pointing to medical conditions.

In the physical examination, the presence of purpuric skin lesions, painful or nodular lesions and joint inflammation are specific features pointing to a possible medical etiology. Other findings suggestive of a medical condition are extensive: adenopathy, friction rubs, unusual hepatomegaly, splenomegaly and gross neurologic defects. Whenever abdominal findings are minimal with respect to the patient's distress, a condition requiring nonoperative care should be suspected as the cause of pain. Steinheber[2] presents a more complete list of those conditions, some of which are discussed below.

Hematologic and Metabolic

Hemolytic anemia usually presents with jaundice, splenomegaly, cholelithiasis, leg ulcers and occasional hepatomegaly. During a crisis there will be fever, chills, malaise with backache and pain in the extremities and in the abdomen. The abdomen is sometimes rigid, mimicking the acute abdomen.[3]

Sickle cell crises manifesting with abdominal pain, anorexia, anemia and musculoskeletal pain may occur in states of infection, acidosis, serum hyperosomolality and electrolyte imbalance. Abdominal pain is a symptom of sickle cell disease in 40 per cent of patients. Left upper quadrant pain may suggest splenic infarction.[4,5]

Amyloidosis occurs in association with prolonged inflammatory or infectious states. The patient presents with hepatic, splenic or renal involvement with or without vascular seeding of other sites. Amyloidosis frequently involves the liver and results in massive hepatomegaly.[3]

Acute intermittent porphyria is an hepatic porphyria seldom occurring before puberty or after the age of 60 and more commonly in women than men (3:2). Most often it is characterized by intermittent colicky abdominal pains, either general or localized. The urine may be dark red, indicating increased porphobilinogen with Ehrlich's aldehyde test.[6]

Collagen, Hypersensitivity, Inflammatory

Systemic lupus erythematosus (SLE) is a chronic inflammatory disease of unknown etiology. The pain attributed to SLE has been attributed to small vessel arteritis with secondary hemorrhage.[7,8] Perforation of the bowel by arteritis from SLE has been reported.[9] Pericarditis nodosa is a form of necrotizing arteritis which primarily involves medium-sized muscular arteries. The etiology is unknown; the pathophysiology is linked to an autoimmune process. Abdominal pain is seen frequently accompanied by anorexia, nausea,

From the Department of Surgery, University of Louisville School of Medicine, Louisville

Table 1

MEDICAL CONDITIONS WHICH MIMIC THE ACUTE SURGICAL ABDOMEN*

FAMILIAL METABOLIC
Acute intermittent porphyria
Familial hyperlipoproteinemia
Hereditary angioneurotic edema
Hemochromatosis
Abdominal migraine
Abdominal epilepsy

ENDOCRINE
Diabetic ketoacidosis
Addisonian crisis
Hyperthyroidism
Hyperparathyroidism

INFLAMMATORY
Pancreatitis
Inflammatory bowel disease
Acute nonspecific gastroenteritis
Enteric infections (typhoid, shigellosis, staphylococcal enterocolitis, etc.)
Primary peritonitis (pneumococcal, tuberculosis)
Pelvic inflammatory disease
Hepatitis (viral, Q fever, alcoholic)
Infectious mononucleosis
Herpes zoster (before appearance of characteristic skin lesions)
Pyelonephritis
Prostatitis
Mesenteric adenitis?

REFERRED PAIN
Thoracic
  Pericarditis
  Pleuritis
  Lobar pneumonia
  Acute myocardial infarction
  Epidemic pleurodynia
  Myocarditis
Abdominal wall (rectus sheath hematoma)
Retroperitoneal
  Renal colic
  Renal infarction
Neurologic
  Tabes dorsalis
  Nerve root compression
Glaucoma
Pelvic
  Mittelschmerz
  Endometriosis
Abdominal migraine
Abdominal epilepsy

COLLAGEN HYPERSENSITIVITY
Acute rheumatic fever
Systemic lupus erythematosus
Polyarteritis nodosa
Periodic diseases
  Familial Mediterranean fever
  Henoch-Schonlein purpura
Allergy?

DRUG-TOXIN
Heavy metals (lead, arsenic, mercury)
Mushroom
Staphylococcus toxin
Arachnoidism (black widow spider bites)
Anticoagulants (especially coumadin)
Narcotic withdrawal

HEMATOLOGIC
Sickle cell anemia
Acute hemolytic states
Leukemia
Clotting abnormalities

MISCELLANEOUS
Intestinal angina
Psychogenic
Central nervous system lesions

vomiting, diarrhea (often bloody) and weight loss.

Infectious hepatitis will present with abdominal pain. More severe pain is felt in the prodromal or anicteric phase. Elevated levels of SGOT and SGPT will help make the diagnosis of hepatitis.[2]

Cholangiohepatitis is a true abdominal emergency. The disease is a pyogenic infection of the liver by enteric organisms with presenting symptoms of severe abdominal pain, jaundice and fever.[10]

**Modified from Steinheber, F.U.: Medical conditions mimicking the acute surgical abdomen. Med. Clin. N. Amer. 57:1560, 1973.*

Drugs and Toxins

The possibility of heavy metal poisoning in a patient presenting with abdominal pain represents a difficult diagnostic task. Acute lead intoxification can be differentiated from other causes of abdominal pain if the physician performs a careful history and physical examination and requests appropriate laboratory aids. Abdominal symptoms appear as the severity of the lead intoxication increases. The patient may complain of vague upper abdominal pain and diarrhea. Within a few days, the patient will experience severe, cramping abdominal pain. Nausea and vomiting may be present.[11]

Orally ingested arsenic is irritating to the stomach and small intestine. Vomiting occurs

immediately or within 15-30 minutes. Cramps, like abdominal pain, may be severe and associated with muscle spasm. Diarrhea of "rice water" consistency will occur, and in several days the patient becomes jaundiced as hepatic necrosis may occur.[12]

Abdominal pain from mercury ingestion causes intense pain in the epigastrium but may extend over the entire abdomen. The pain is cramping in nature, and muscle cramps may occur in the extremities.[13]

Abdominal pain may also occur following venomous snake or black widow spider bites. The clinical picture will vary according to the type of snake. All may have associated nausea, vomiting and abdominal pain.[14] Usually those patients with black widow bites have a markedly rigid abdomen.

Referred Pain (Thoracic)

The lower thorax and upper abdomen are neurologically inseparable. Certain extra-abdominal diseases do not lead to abdominal lesions and yet may manifest as acute abdomen. Diaphragmatic pleuritis (epidemic pleurodynia) and lobar pneumonia are two such examples of referred pain. Usually there will be an associated change in respiration. The pain of acute myocardial infarction is substernal and often referred to the epigastrium. This may be confused with duodenal or gall bladder diseases. Serum enzymes are useful in differentiating the various disease processes. Acute idiopathic pericarditis and coronary artery disease may cause significant abdominal pain. The pain will usually be localized to the epigastrium. A friction rub is characteristic of acute idiopathic pericarditis. If the patient has been on anticoagulants for coronary artery disease, retroperitoneal bleeding may occur after trauma and may be a source of abdominal pain.[14]

This paper has only presented highlights of some of the medical conditions which may mimic the acute surgical abdomen. Some of these conditions—acute cholecystitis, active duodenal ulcer, acute pancreatitis, for example —may become surgical problems. A number of very important causes of the acute abdomen have not been discussed in this brief report; among these are pancreatitis, gastroenteritis, peptic ulcer, rheumatic fever and mesenteric adenitis.

Acknowledgement

The authors wish to thank the following 1974-75 senior medical students who contributed to this report: Eugene A. Bryant, Stephen E. Green, Joseph Mesa, Marvin C. Prichard, Barton H. Reutlinger, James L. Walker and Richard L. Weddle.

B. J. Parson, M.D.
Hugh C. Williams, M.D.

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EDITORIAL

Educating Educators

JUNE 1974 Dr. Mert Landay was appointed Dean and Professor of Periodontology at the University of Louisville School of Dentistry. He came here from Temple University where he had taught Periodontology since 1964. His publications reflect as intense an interest in educational psychology as in Periodontology and include such subjects as *An Individualized Approach to the Teaching of Periodontics, Behavioral Objective, Teaching Problem Solving Skills in Dentistry,* and *An Intervention Model to Improve Educational Skills in a Professional School.*

He sees the problem in dental education as a need for professional teachers to be trained as teachers. Medical and dental teachers are trained as doctors and dentists. Those who wish to teach then do so without any further background in how to instruct other than having been instructed. It seems logical that the use of modern and researched teaching techniques would improve the amount, quality and efficiency of training of professional students.

During the past year Dr. Landay has contracted with Growth Unlimited to conduct workshops at the School of Dentistry to acquaint the faculty with newer and effective instructional methods and to do individual assessments and tailored consultations with faculty members who wish to improve their instructional skills. Involvement in the workshops is voluntary but participation has been very enthusiastic and to date 60 per cent of the faculty have enrolled.

Growth Unlimited is a corporate group of young, enthusiastic teachers interested in increasing the quality and quantity of student-teacher communication and in breaking down old, crippling barriers between students and teachers. It is directed by Dr. Jay Yanoff and Mr. Robert Allender who have achieved their postgraduate degrees at Temple University, the Department of Psychoeducational Processes. They describe their methods and means in a special article in this issue.

Dr. Landay says the activity is now in its early stages and that he is extremely pleased at how well the faculty is becoming acquainted with new teaching techniques.

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SPECIAL ARTICLES

Frontier Nursing Service, 1925-1975

James B. Holloway, Jr., M.D.
Lexington, Kentucky

THE Frontier Nursing Service was founded by Mrs. Mary Breckinridge in 1925 shortly after the death of her children and divorce from her husband. This active, energetic woman, with many talents and much energy, found herself with little or nothing to do, and applied herself to what she considered the needs of her State. She went to England, became a midwife and then came to Kentucky in 1925 founding the Frontier Nursing Service in Leslie County, Kentucky.

Before her death in 1965, the Frontier Nursing Service had grown enormously. It served an area of 600 square miles. There was a hospital at Hyden, headquarters at Wendover some five miles up the Kentucky River, and six or seven nursing outposts. Graduate nurse midwives were scattered worldwide in almost every backwoods corner of the world. It had served the community well during the years, having reduced the infant and maternal mortality rate there to a rate lower than any other county in Kentucky.

In addition to the care of the mother and the newborn, numerous clinics had been held from time to time on a regular basis. Ear, nose and throat surgeons came to Hyden for tonsil days. Doctor Stucky of Lexington, used to go there as well as Doctor Breckinridge. Doctor Francis Massie began holding surgical clinics twice a year at Hyden in 1927. The writer began to go with him in 1958. The last clinic was held in 1965. These surgical clinics consisted of consultation, rounds and three days of operating. About 25 patients were operated on each time. During these many years, there was no operative mortality. Many prominent surgical figures were brought to Hyden by Doctor Massie from time to time, so that the fame of the Frontier Nursing Service and its endowment increased thereby.

The budget of the FNS in the early 1960's ran around $300,000 a year; all of these funds were raised personally by Mrs. Breckinridge. When she turned the reins of the Frontier Nursing Service over to Miss Helen Browne, her able assistant who had come from England in 1939, things were in good stead and the government was beginning to take an increasing interest in the people of the area and in funding programs. Since that time, under Miss Browne's leadership, the budget is somewhat over $2 million a year. New educational programs have started. The excellent care has continued and more attention has been given to the family as a whole. The midwifery school, so ably begun by Mrs. Breckinridge, has been continued and expanded. Regular physicians have been added to the Staff so that at the present time, there are five.

The original hospital opened in 1928, on top of the mountain above Hyden. It has been supplanted by a new 50-bed unit in the center of Hyden, with ample road access. The nurse midwives in the Frontier Nursing Service are working much further afield in the State of Kentucky, in places such as Somerset and Covington.

Throughout the years, there has been some opposition to the Frontier Nursing Service, both spoken and unspoken. Many physicians in Eastern Kentucky have felt that the presence of the Frontier Nursing Service has stultified the development of private practice in Hyden. The proper answer to these charges and feelings is the obvious one that there is more than one way to practice medicine. The Frontier Nursing Service has stood on its own feet, done

Frontier Nursing Service

(continued from preceding page)

a superb job for the community and is managing to change with the times. Within the next year, a new director of the Frontier Nursing Service will replace Miss Browne, Doctor W. Battaile Rogers Beasley, an internationally known authority on family planning, an experienced obstetrician and a man well known in the Hyden-Leslie County community. For the first time, the Frontier Nursing Service has a comptroller, a hospital administrator and development director. Plans are underway for the new capital Fund Drive. The Board of Directors has developed in the past few years as an independent organism, and at the present time, is actively directing the thrust and affairs of the Service. It would appear that the next 50 years of the Frontier Nursing Service will offer as much to Leslie County, Kentucky and indeed the State, the nation and the world, as it has in the past 50 years.

Annual Meeting Reminders

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You may be reached through this number at the Bluegrass Convention Center during the KMA Annual Meeting, September 23-25.

REGISTRATION INFORMATION

A registration booth will be located at the entrance to the Technical Exhibit Hall of the Bluegrass Convention Center throughout the Annual Meeting. The booth will open at 8 a.m., Tuesday, Wednesday and Thursday, September 23-25.

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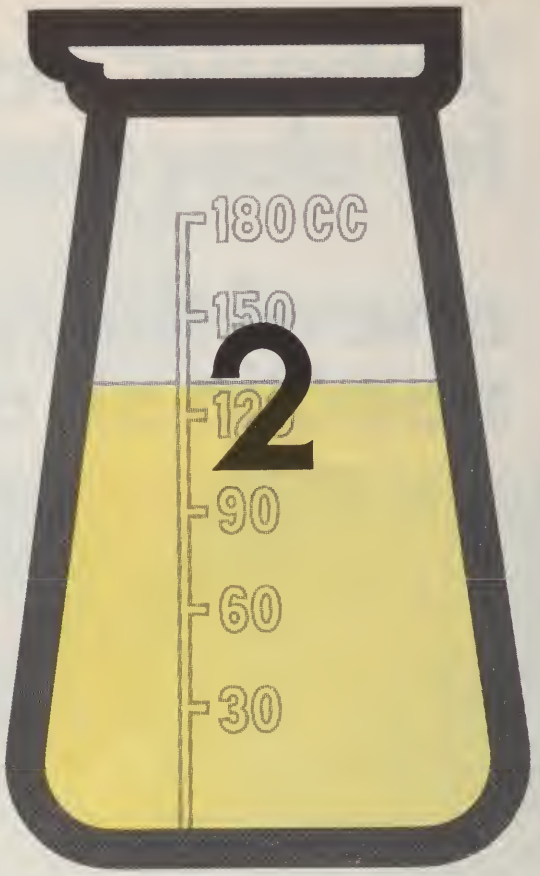
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Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

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* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

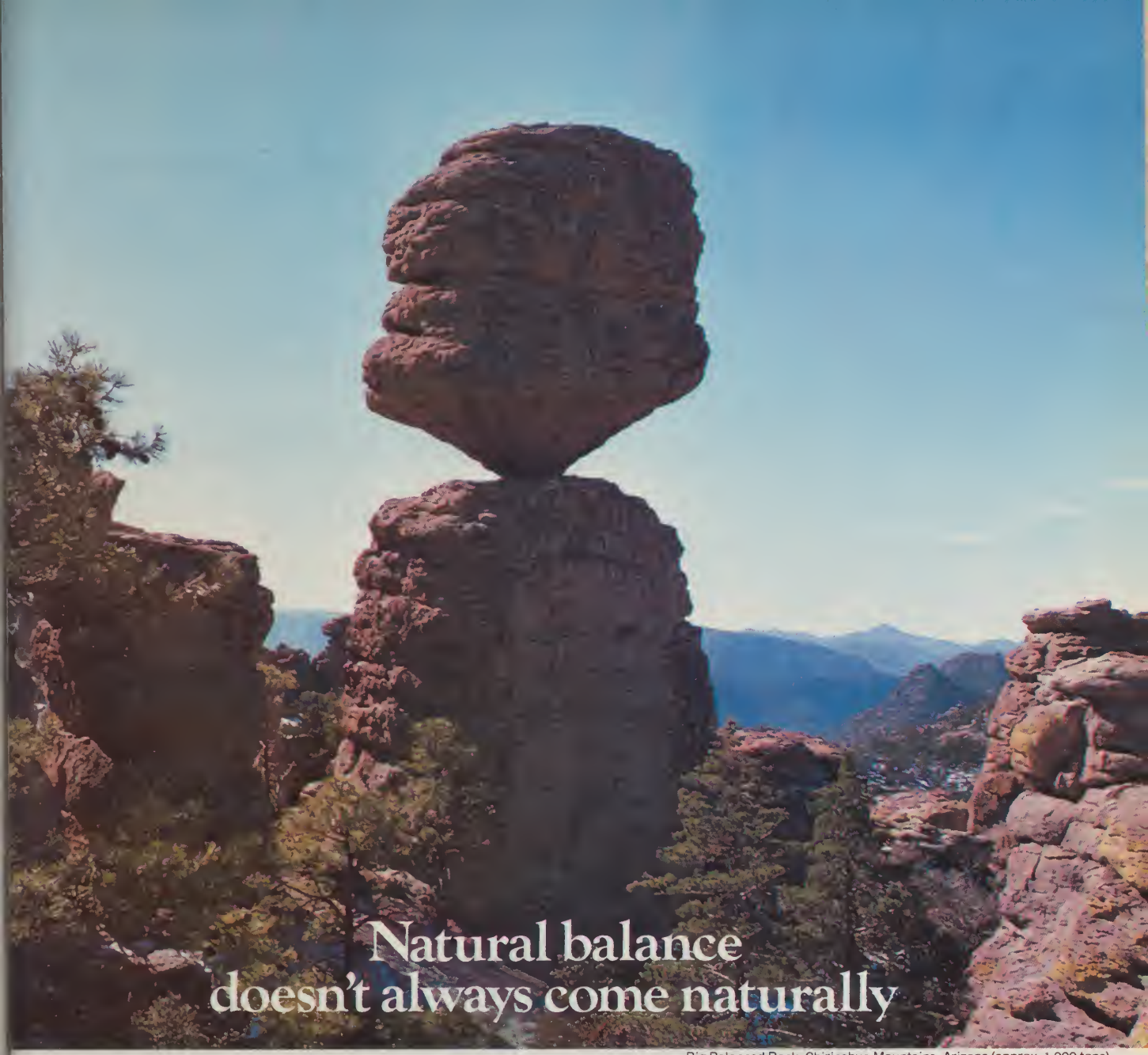
Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
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'DYAZIDE'

Just once or twice daily for maintenance. Hydrochlorothiazide to help keep blood pressure down and triamterene to help keep potassium levels up.



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

- Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
- Can relieve nausea and vomiting often associated with vertigo.*
- Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
- Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
- Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

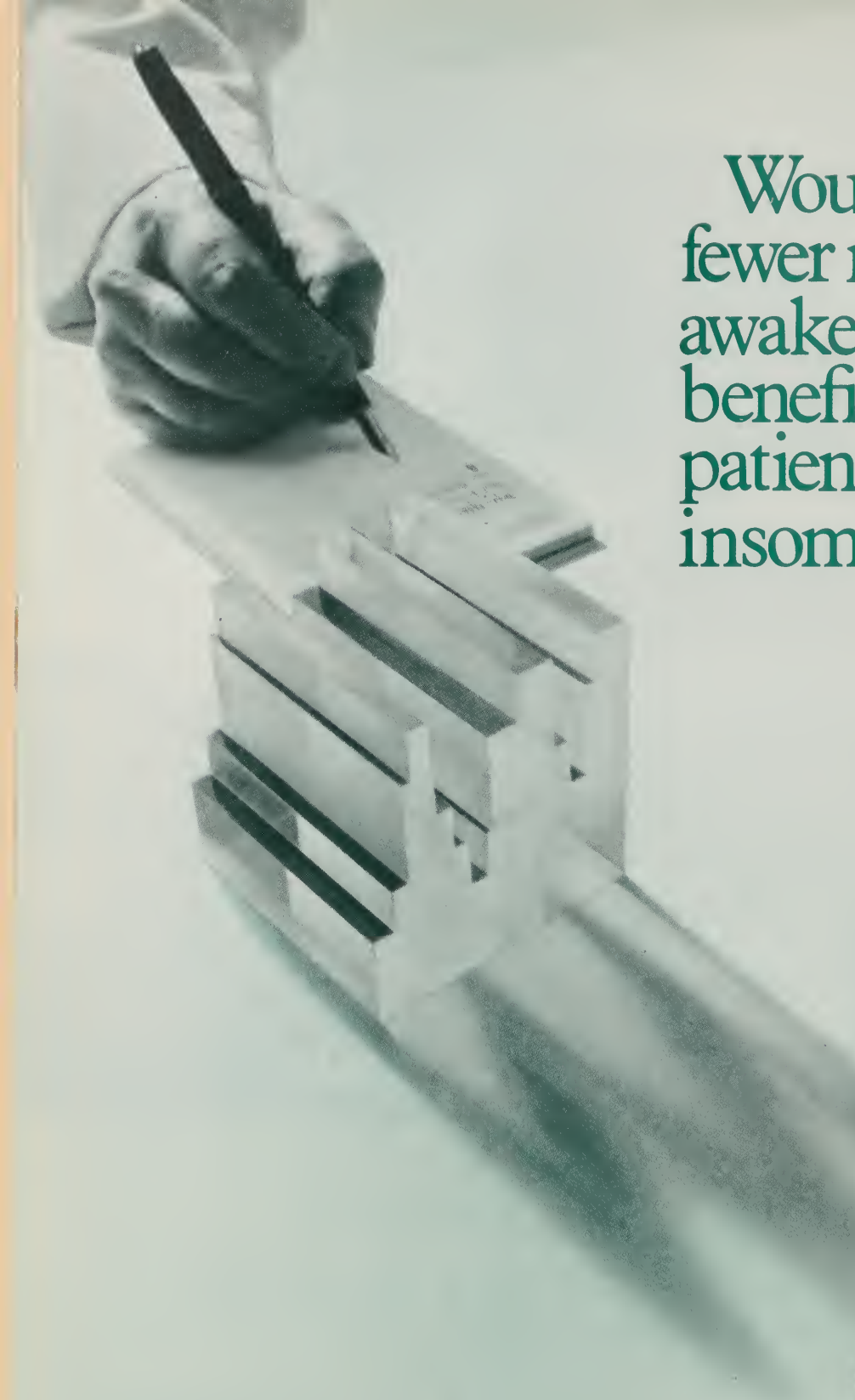
Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

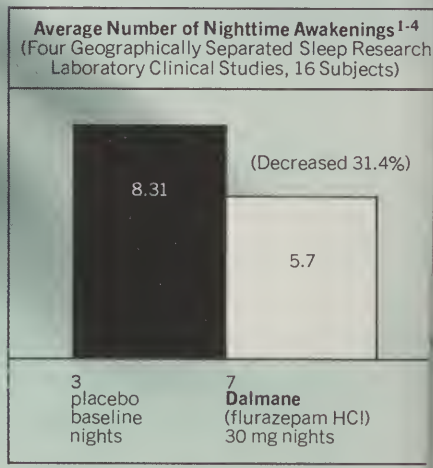
Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*



Would sleep with fewer nighttime awakenings benefit your patients with insomnia?

Highly predictable results for your patients with trouble staying asleep...

...can be obtained with Dalmane (flurazepam HCl). As shown below, Dalmane significantly reduces nighttime awakenings:[1-4]



And for those with trouble falling asleep or sleeping long enough...

...Dalmane (flurazepam HCl) also delivers excellent results. Clinically proven in sleep research laboratory studies: on average, sleep within 17 minutes that lasts 7 to 8 hours.[5]

Dalmane (flurazepam HCl) is relatively safe, seldom causes morning "hang-over"...

...and is well tolerated. The usual adult dosage is 30 mg *h.s.*, but with elderly and debilitated patients, limit the initial dose to 15 mg to preclude oversedation, dizziness or ataxia. Evaluation of possible risks is advised before prescribing.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th annual Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971
3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
5. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

Depend on highly predictable results with

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.



specifically indicated for insomnia

Objectively proved in the sleep research laboratory:

- **sleep with fewer nighttime awakenings**
- **sleep within 17 minutes, on average**
- **sleep for 7 to 8 hours, on average,**

with a single *h.s.* dose.

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ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the information is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A

the sun and solar keratosis...

Over-exposed



and often underdiagnosed

Solar keratosis is not an uncommon medical problem.

Of course, the prevalence of keratotic lesions is greater in locations south of the 38th parallel—the so-called "Solar Keratosis Belt"—receiving the greatest amounts of solar radiation. However, solar keratosis can occur among any light-skinned population, usually in persons over 40, wherever people are subject to extended exposure to the sun.

Solar keratoses are generally not difficult to identify.

These skin lesions are usually multiple, flat or slightly elevated, brownish or red in color, papular, dry, rough, adherent and sharply defined. They are found on areas of the skin having extensive exposure to sunlight. Clinical characteristics of the lesions, their predominant location on exposed surfaces, the age of the patient and his skin type are important considerations in the diagnosis.

Solar keratoses can, and should, be treated because they are potentially premalignant.

Chronic exposure to sunlight frequently leads to degenerative changes in the skin. This can often result in the development of multiple, potentially premalignant keratotic lesions. Therefore, early detection and treatment is advisable.

Treatment with Efudex (fluorouracil) provides a high degree of effectiveness with a low recurrence rate, ease and convenience of therapy, low incidence of scarring, excellent cosmetic results in most cases, and a high level of patient acceptability.

Efudex® 5% Cream
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Because there may be more than meets the eye.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris (hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Case history for patient photographed at left on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

CASE 7-73—The patient was a 26-year-old, White, Gravida 2, Para 1, delivered at another hospital of a 5 lb 8 oz female in 1968 without problems. She was seen with her current pregnancy by a family physician on October 9, 1972, when she had a blood pressure of 118/60 and weight of 98 lbs. Her EDD was felt to be April or May 18th. Her LMP was not normal. Her prenatal record was not presented to the Committee. However, a phone conversation with her physician revealed her urine was negative until March 1 when it was 3+ for albumin and negative for sugar. Some swelling was noted. She weighed 115 lbs. Her blood pressure was 128/60. She complained of some nausea and vomiting. She was next seen March 29, 1973, her weight was 119 lbs, blood pressure 160/98, again urine 3+ albumin. No information was supplied as to treatment given. She was seen in the Emergency Room of a 29-bed hospital at 10:55 p.m. on April 6 following a convulsion. Her lips were cyanotic, a tongue blade was inserted in her mouth and her physician was notified. She had another seizure and became quite cyanotic. The seizure lasted three minutes. Her pupils then constricted. Her blood pressure was 150/100. She received 2 cc 50% Mg-SO_4 intramuscularly, Furosemide 2 cc intramuscularly, 100 mg Diphenylhydantoin, 50 mg Chlorpromazine by injection and Pentobarbital, 2 cc 1/6 gr Morphine.

Ten per cent dextrose in water was given intravenously, oxygen at 5 liters, and a Foley catheter was inserted and dark brownish urine was obtained. According to the nurses' notes, her blood pressure was lower. At 6:30 a.m. her blood pressure was 130/100, pulse 68, respiration 24-28. Her pupils remained nonreactive and dilated. She failed to respond to either painful or verbal stimuli. Her physician examined her at 7:45 a.m. Her blood pressure was 130/84, pulse 84, fetal heart tone 144. Arrangements were made to transfer her to a larger hospital.

The family said she had severe chest pain on April 4 then seemed to feel fine the next day. She talked with them. The nurses at the first hospital thought she had gone to sleep, and when they tried to awaken her, found her comatose.

She was transferred to another 65-bed hospital by ambulance stretcher at 9:30 a.m. on April 7, 1973, where she was seen by an obstetrician. Blood pressure was 120/90, temperature 98.4, pulse 72, fetal heart tones were good. She was thought to be 28 weeks pregnant. Her vital signs were monitored, intravenous fluids started, 1000 cc of 5% dextrose in water, BUN, type and cross-match were done. She was then prepared for Cesarean section. A Bennet respirator was started. She became cyanotic and comatose around 3 p.m. Her hourly output had been in excess of 20 cc/hourly. Her blood pressure rose to 220/126, pulse 140. She received Adrenalin 1 cc intramuscularly, Furosemide 20 mg, Mg-SO_4 4 cc intramuscularly stat (percentage not stated) 6 cc Mg-SO_4 repeated. Her blood pressure did drop around 3:25 to 90/0 and the Levarterenal bitartrate was started. Fetal heart tone was weak. A nurse was in constant attendance. Her blood pressure was more in the normal range; however, her pulse remained rapid at 140. She had 400 cc urine output by 11 p.m., and her blood pressure was more stable.

She began to have uterine contractions April 8; her pulse was approximately 128, blood pressure 130/100, urine output 810 cc. However, she remained in a coma and needed the respirator. Her membranes were ruptured by her physician at 7:55 a.m. on the 8th. The cervix was 6 cm dilated at 9:35 a.m. The contractions were strong every 10 minutes and she was taken to the delivery room where she delivered a 3 lb 8 oz male with midline episiotomy and low forceps without anesthesia. The infant's Apgar was 8; however, it expired the following day. The placenta was expressed spontaneously intact and the blood loss estimated at 100 cc.

A portable chest x-ray obtained on April 9 revealed the endotracheal tube in place, a large plural effusion was noted on the right side. The left side was also quite hazy, suggesting the presence of fluid there also. Air bronchograms indicated that pneumonic consolidation was present.

Her blood pressure was maintained by 5% dextrose in water with Levarterenal bitartrate. She received 500 mg solution of Hydrocortisone intravenously stat and 100 mg in 5% dextrose in water, 1,000,000 units of Penicillin every eight hours, intramuscularly. A consultant was called to treat the pulmonary edema. An electrocardiogram revealed ST elevation but no Q waves noted. This was felt compatible with an infarct or pericarditis. The prognosis was considered grave. Her fluids were monitored sparingly. She had a tracheostomy and was on a Bennet respirator. She received Furosemide 40 mg intramuscularly daily. In spite of this therapy, she expired at 7:20 a.m. on

April 13, 1973. There was no autopsy. The final diagnosis was:

Eclampsia at 28 weeks
Pneumonia with bilateral plural effusion
Infant expired in the neonatal stage

Comments

The Committee classified this death as a direct obstetrical death with preventable factors. The Committee was not presented with a complete protocol for we have no record of her intake and output. Most likely she died in congestive heart failure and pulmonary edema. Several preventable factors are felt to be. First, she presented with albuminuria on March 1 when it was recorded as 3+. It is felt by the Committee at this time that hospitalization and treatment of the preeclampsia should have been carried out. It is realized that delivery at this stage would not give us a viable infant.

The second point is noted that when she was finally admitted, more than a month later, multiple drugs were used to treat her. We have written in this column many times that the optimum treatment for severe preeclampsia and eclampsia is intravenous Magnesium Sulfate to get the patient under control, so that they are practically areflexic, then delivery should be accomplished either by Cesarean section or induction of labor.

Again, as noted many times in this column, an autopsy was not carried out. It seems that she died in congestive heart failure. One cannot be certain of this without an autopsy.

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their fall and winter meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

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Address: _____

City: _____ State: _____ Zip: _____

Letters to the Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

I wish to thank Doctor McAuliffe for his letter in the June, 1975 issue of *The Journal of KMA*. The herpesvirus has evolved into a much broader problem than originally envisioned in that two antigenically different strains of herpesvirus hominis (I & II) have been identified, with strain II virus occurring below the hips and transmitted venereally. (Exceptions have been brought about by homosexual transmission.)

Additionally, Sabin and others have offered proof that the strain II virus is a significant cause of cervical cancer. More recently, by electron microscopy, the herpesvirus hominis has been visualized on or in the human sperm membrane being incorporated into a fertilized ovum. Thus evidence of vertical as well as horizontal transmission of the herpesvirus hominis exists. Therefore, in view of all of the above, the disease herpes progenitalis probably should not be considered as **lesser** venereal disease—certainly not in incidence where it may be exceeded by only gonorrhea and evidently not in the serious sequellae which may occur.

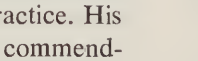
William E. McDaniel, M.D.
342 Waller Avenue
Lexington 40504

From The Editor's Notebook

I wrote recently a letter of congratulations and good wishes to a colleague of mine who retired from a long and successful practice. His reply was thoughtful, succinct and commendable; I will share two paragraphs with you:

"Retirement is bittersweet but I felt the proper thing at age 69 to step aside. It was no longer possible for me to keep up physically and educationally with the type of practice I desired to do.

"I have great respect for the young men now in medicine. They are the best trained ever. My patients will be in good hands."



A recent article in *JAMA* with an accompanying editorial about Paget Disease which I thought was Paget's Disease, provoked a questioning letter to the Editor. The brief reply was in part ". . . we have dropped the 's from all eponyms" and was written by Hugh H. Hussey, M.D., who initialed the note H^3. Oh, breathtaking **brevity!**



Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed. "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."*

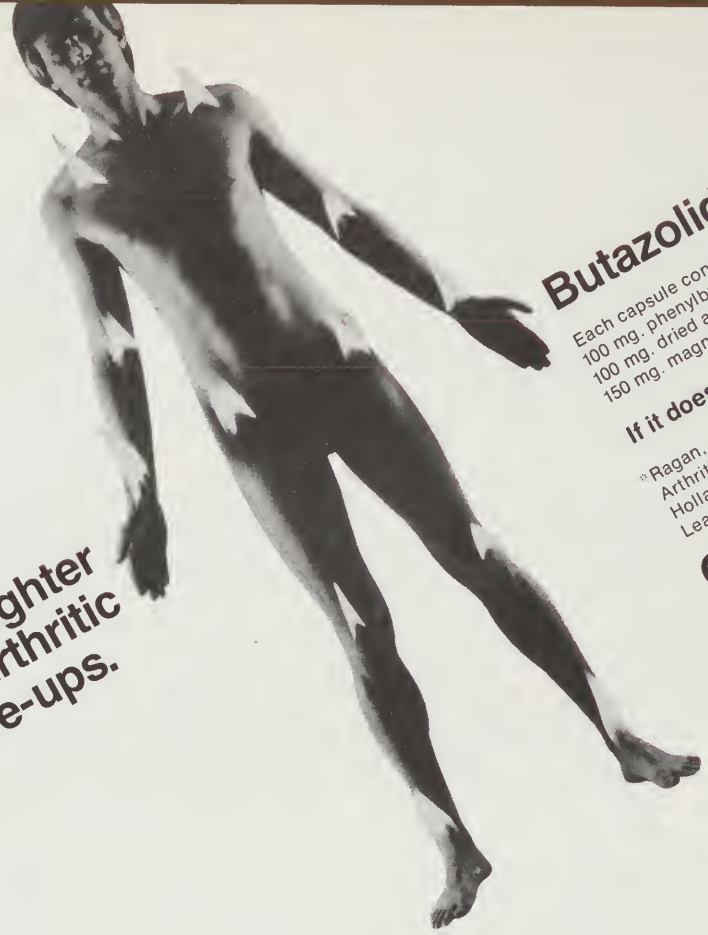
If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.



Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

*Ragan, C.: The Clinical Picture of Rheumatoid Arthritis, in Arthritis, ed. 8, edited by J. L. Hollander and D. J. McCarty, Jr., Philadelphia, Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Fire fighter for arthritic flare-ups.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
(B)98-146-070-J (10/71)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
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BU 10259

ORGANIZATION SECTION

KMA ANNUAL MEETING—SEPTEMBER 23-25

You Won't Want to Miss It— 1975 KMA Annual Meeting

The 1975 KMA Annual Meeting will officially get underway on Monday, September 22, when the first meeting of the House of Delegates is held at 9 a.m. at the Ramada Inn/Bluegrass Convention Center in Louisville.



Doctor Cooper

The scientific program, which will begin on Tuesday morning, September 23, will feature many timely medical topics and nationally recognized speakers. The four general sessions will deal with "Sexual Performance," "Cancer —Detection and Therapy," "Sports Medicine" and "Gut—Issues and Answers."

Meetings of 17 specialty groups will be held on Tuesday and Thursday afternoons, beginning at 1:30 p.m. Meeting on Tuesday, September 23, will be the anesthesiologists, chest physicians, emergency physicians, pathologists, pediatricians, plastic and reconstructive surgeons, orthopedists, general surgeons and urologists. Groups representing dermatology, ENT, family medicine, neurosurgery, obstetrics and gynecology, occupational medicine, internal medicine and psychiatry will meet on Thursday afternoon, September 25.

The President's Luncheon, to be held at 11:50 a.m., Wednesday, September 24 in Belle Hall at the Bluegrass Convention Center, will feature Theodore Cooper, M.D., Ph.D. Doctor Cooper is the Assistant Secretary for Health with the Department of HEW. KMA award presentations and the installation of the 1975-76 KMA President, David A. Hull, M.D., will also highlight this year's President's Luncheon. Tickets will be on sale at various locations at the Ramada Inn and Bluegrass Convention Center.

Other features of the 1975 Annual Meeting include the Annual Convention of the Woman's Auxiliary to KMA on September 22-24, the KEMPAC Seminar on Monday evening, September 22, many informative scientific and technical exhibits and alumni reunions of the University of Louisville School of Medicine.

Complete details of all facets of the 1975 Annual Meeting are featured in the August issue of *The Journal of KMA*.

Miscellaneous Meetings Listed For 1975 Annual Meeting

Many meetings will be taking place during the KMA Annual Meeting. A list of miscellaneous meetings scheduled at press time during the three-day session is printed below for your information.

Sunday, September 21

12:30 p.m.	KMA Board of Trustees, Luncheon Meeting, Grand Republic Room, Bluegrass Convention Center

Monday, September 22

9:00 a.m.	KMA House of Delegates, Jeffersonian Rooms, Ramada Inn
12:30 p.m.	Reference Committee Chairmen, Luncheon, Majestic Room, Bluegrass Convention Center
2:00 p.m.	Reference Committee Meetings, Island Queen and Idlewild Rooms, Cincinnati Room, Eclipse Room, Grand Republic Room, Delta Queen Room, Natchez Room, Bluegrass Convention Center
6:00 p.m.	KEMPAC Reception, Seminar and Banquet, Belle Hall, Bluegrass Convention Center

Tuesday, September 23

12:00 noon	KMA Executive Committee and Reference Committee Chairmen, Luncheon Meeting, Mark Twain Room, Ramada Inn
12:00 noon	Kentucky Chapter, American College of Surgeons, Luncheon Meeting, Jeffersonian Room, Ramada Inn
5:30 p.m.	KMA—WA-KMA Reception to Honor Presidents-Elect, Poolside, Ramada Inn
6:00 p.m.	Kentucky Chapter, American College of Chest Physicians, Social Hour and Dinner, Grand Republic Room, Bluegrass Convention Center
6:00 p.m.	Kentucky Urological Association, Social Hour and Dinner, Jefferson Club

6:30 p.m. UL Class of '60, Dinner, Jeffersonian and Magnolia Rooms, Ramada Inn

6:30 p.m. Kentucky Chapter, American Academy of Pediatrics, Social Hour and Dinner, Norton-Children's Hospital

Wednesday, September 24

11:50 a.m. KMA President's Luncheon, Belle Hall, Bluegrass Convention Center

4:00 p.m. KMA Board of Trustees, Meeting and Dinner, Grand Republic Room, Bluegrass Convention Center

6:30 p.m. UL Class of '65, Social Hour and Dinner, Jeffersonian and Magnolia Rooms, Ramada Inn

7:00 p.m. KMA House of Delegates, Meeting, Belle Hall, Bluegrass Convention Center

Thursday, September 25

7:30 a.m. Insurance Advisory Committee, Kentucky Academy of Family Physicians, Breakfast, Kentucky Room, Ramada Inn

12:00 noon Kentucky Occupational Medical Association, Luncheon, Kentucky Room, Ramada Inn

12:00 noon Kentucky Chapter, American College of Physicians, Luncheon, Louisville Room, Ramada Inn

12:00 noon KMA Board of Trustees, Luncheon Meeting, Jeffersonian Room, Ramada Inn

6:00 p.m. Kentucky Psychiatric Association, Social Hour and Dinner, Jeffersonian Room, Ramada Inn

6:00 p.m. Kentucky Dermatological Association, Dinner, Jefferson Club

6:30 p.m. Kentucky Chapter, American College of Radiology, Dinner, Kentucky and Magnolia Rooms, Ramada Inn

AAMA To Hold Annual Meeting October 5-10 in Louisville

Kentucky will be host to the 19th Annual Convention of the American Association of Medical Assistants. Over 1,000 members of the Association are expected to attend this national meeting which will be held October 5-10 at the Galt House Hotel in Louisville.

Convention Chairman, Mrs. Mabel Veech of Louisville, announced the program theme for the convention will be "AAMA: Fast Track to Education" and will focus on the educational programs of the AAMA.

Ky. Medical Assistance Program Reimbursement to Physicians

The following article was prepared by the Division for Medical Assistance, Bureau for Social Insurance of the Kentucky Department for Human Resources. Information on the Kentucky Medical Assistance Program Drug Pre-Authorization Project is available from the Bureau for Social Insurance.

Physician In-Hospital Fees

The development of a revised method of reimbursement for physicians' in-hospital services is viewed by the Medicaid Program as a significant step toward eliminating certain inequities which have prevailed for a number of years in the physician element of the Program.

The revised payment mechanism, which became effective January 1, 1975, enables the Program to introduce the usual and customary concept by reimbursing physicians at a level of 62 per cent of their usual and customary fees for in-hospital services.

The allocation of state funds which permitted this improvement was not sufficient to pay the full amount of usual and customary fees; consequently, it was necessary for the Program to utilize the funds available to pay as high a percentage as possible of the amounts shown by fee profiles, with the same percentage applying to all services and all physicians.

In view of present federal regulations which stipulate that physician payments under Medicaid may not exceed those established for physicians under Medicare, the Program adopted the established profiles of physicians under Medicare, supplemented by data from other sources for services not included in the profiles (e.g. pediatric and obstetrical services).

According to latest estimates, the usual and customary payments to physicians for in-hospital services will cost the Program an additional $3,558,600 during Fiscal Year 1974-75. Based upon the present federal/state matching ratio of 72/28, the Program will expend $992,138 in state dollars during Fiscal Year 1974-75; this will be matched by federal funds totaling $2,566,462. For Fiscal Year 1975-76, state appropriations required to reimburse physicians at the 62 per cent level will amount to $2,037,654; a total amount of $7,117,200 of federal/state funds will be required during that Fiscal Year.

KMA Provides Placement Service to Physicians, Communities

Perhaps you have just completed your internship, residency, military obligation or have some other reason for needing to make a change. Perhaps you are a physician in practice and need an associate or replacement. If so, the KMA Physicians Placement Service is available to help you.

The Physicians Placement Service is designed to help physicians find a desirable area in which to establish practice or to relocate and to help established physicians find associates.

A semiannual listing of "Opportunities for Practice in Kentucky" is published by the Placement Service. This report lists over 100 areas in Kentucky that need family practitioners either in association with another physician or as a replacement. The Service maintains a similar listing of areas in need of medical specialists. Opportunities for partnership or group practice are also listed and requests are accepted from both physicians and communities for satisfactory placement.

As an additional service the KMA Placement Service also publishes, "Physicians Seeking Locations," a quarterly listing. This is compiled from data received from the American Medical Association, requests from recipients of the Rural Kentucky Medical Scholarship Fund, interns and residents in Kentucky, and personal inquiries to the KMA office.

It is the policy of the Placement Service to provide a two-way flow of information between interested parties, rather than try to "place" physicians in the "right" practice situation.

The Service sends a questionnaire to the applicant physician to obtain information on his educational background, his interests, and preference of type of practice. Upon return of the questionnaire, the physician is sent a list of openings in his area of interest. Each opening is detailed on its facilities for home life, office space, proximity to hospital facilities and other specifics.

Each physician contacting this office for assistance in finding a suitable location for practice is requested to complete a questionnaire in order that his name may be carried on the next listing of "Physicians Seeking Locations."

All qualified physicians who request assistance from the Placement Service are given help. An applicant need not be a member of the Kentucky Medical Association and there is no charge either to the physician or to the community seeking the services of this program.

Inquiries may be addressed to the Physicians Placement Service, Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

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Come early, or stay late.



Take advantage of the off season rate. Combine your education & your vacation.

Southern Medical Association 69th Annual Scientific Meeting

Miami Beach, Florida—Hotel Fontainebleau Nov. 16-19, 1975

We could draw pretty word pictures about Miami—the scintillating beaches, the glamorous hotels, the superb cuisine, the intriguing spots to visit, the unequaled vacationland—but we won't. You'll have to find out for yourself.

But we will tell you about the most exciting scientific medical meeting of the year – the 69th Annual Scientific Meeting of the Southern Medical Association – featuring a wide range of symposia, 22 sections, live teaching demonstrations, learning center, postgraduate courses, closed-circuit television—something for every specialty.

The Continuing Education Program of the Southern Medical Association has been granted full approval by the American Medical Association's Council of Medical Education.

The best of two worlds is awaiting you.

Make your plans now while reservations are available. Write: Southern Medical Association, 2601 Highland Avenue, Birmingham, Alabama 35205.

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consider the differences...

Desiccated animal gland thyroid products can vary in potency from batch to batch.

Because iodine content rather than biological assay is used to measure the standard of many desiccated thyroid products, biologic activity can vary from batch to batch. Even when biologic assay is employed, biologic activity can only be approximated.



1 It is recognized that T_4 and T_3 content in desiccated thyroid and thyroglobulin varies from animal to animal, by animal species, geography, and animal diet.

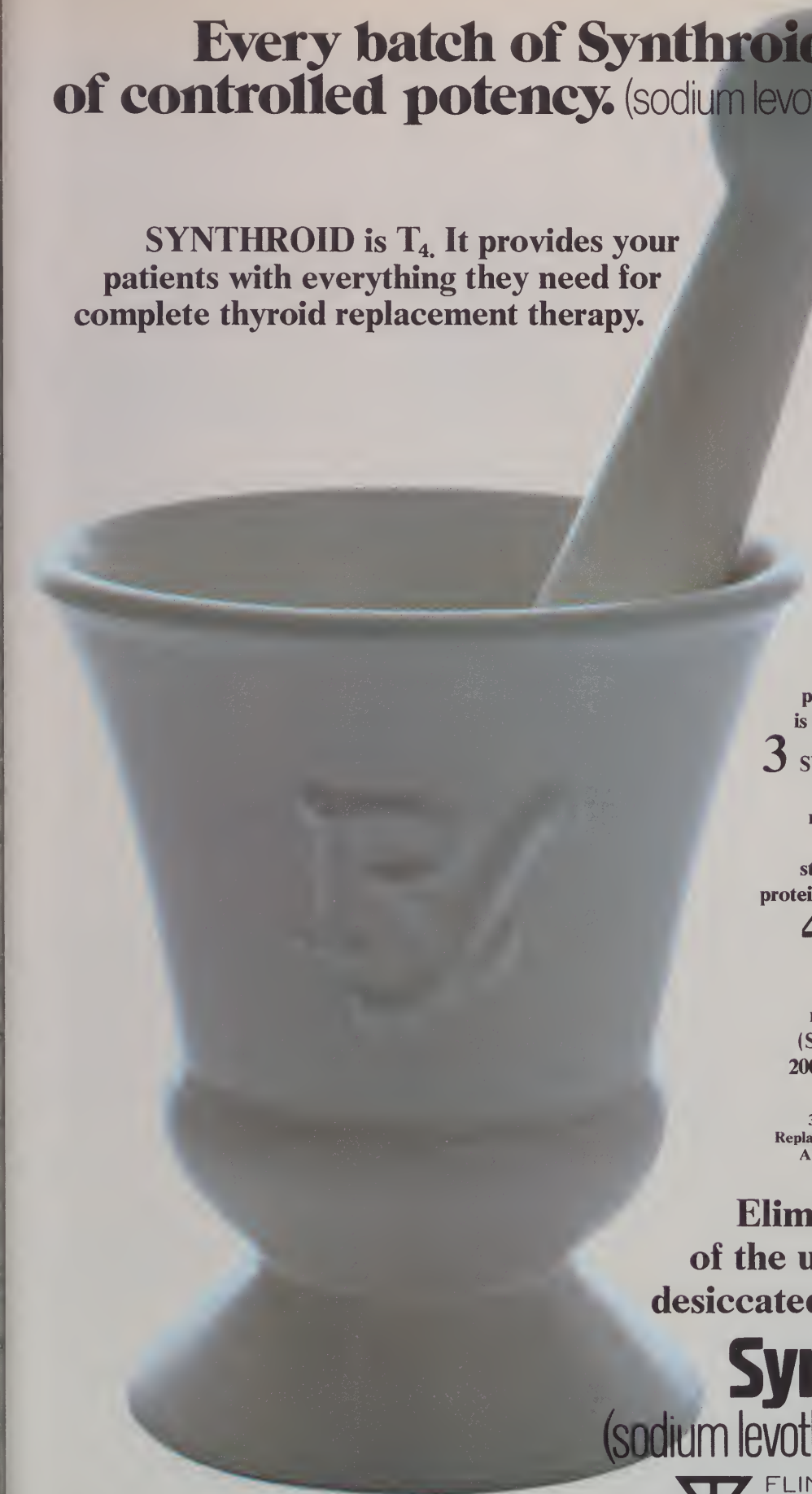
2 Of therapeutic concern: In addition to varying amounts of T_4, desiccated thyroid may contain varying amounts of T_3, a potent compound with rapid onset and fleeting action that can produce metabolic surges.

3 Even when kept under proper storage conditions, desiccated thyroid deteriorates more rapidly than the synthetic hormone.

4 The "usual maintenance dose" for the widely prescribed desiccated thyroid is "from 1 grain to 3 grains per day, but it may vary, in individual patients from 1/2 grain to 10 grains."[1] The "usual maintenance dose" of the most widely prescribed thyroglobulin (which is also a desiccated thyroid product) is "0.5 to 3.0 grains daily."[2]

1. Armour Thyroid (Tablets). 1975 Physicians' Desk Reference. p. 561.
2. Proloid® (thyroglobulin). 1975 Physicians' Desk Reference. p. 1575.

Every batch of Synthroid® T_4 is of controlled potency. (sodium levothyroxine, U.S.P.) FLINT



SYNTHROID is T_4. It provides your patients with everything they need for complete thyroid replacement therapy.

1 Sodium levothyroxine is *not derived* from any animal gland source. It is a synthetic and, since sodium levothyroxine is the only active ingredient, its weight is the sole determinate of potency.

2 SYNTHROID (sodium levothyroxine) is T_4 which is converted by the patient to T_3 at the cellular level, thereby providing a physiologic source and amount of T_3 to meet metabolic needs for complete thyroid replacement therapy. Because the onset of effect is slower and more steady, the possibility of sudden metabolic surges is reduced with SYNTHROID therapy.

3 SYNTHROID (sodium levothyroxine) products have a longer and more reliable shelf life than Thyroid U.S.P. when kept under the same proper storage conditions. There is no animal protein present in SYNTHROID products.

4 A recent study of 44 patients with hypothyroidism indicates that 89 percent of the patients were maintained with doses of L-thyroxine (SYNTHROID) between 100 mcg. and 200 mcg. (0.1 mg. and 0.2 mg.) per day.[3]

3. Stock, J.M., Surks, M.I., and Oppenheimer, J.H.: Replacement dosage of L-thyroxine in hypothyroidism. A re-evaluation. New Engl. J. Med. *290*:529-33, 1974.

Eliminates many of the uncertainties of desiccated thyroid therapy.

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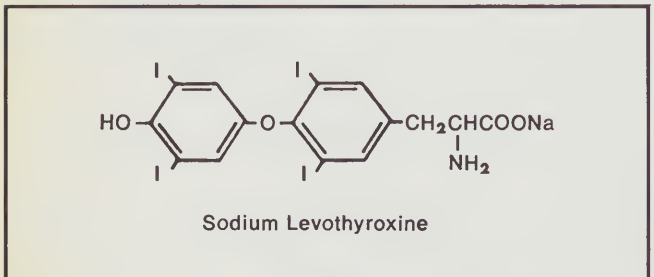
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Synthroid Tablets—for oral administration
Synthroid for Injection—for parenteral administration



Description

SYNTHROID (sodium levothyroxine) **Tablets** and SYNTHROID **Injection** contain synthetic crystalline sodium levothyroxine (L-thyroxine). L-thyroxine is the principal hormone secreted by the normal thyroid gland.



Sodium Levothyroxine

Actions

SYNTHROID (sodium levothyroxine) **Tablets,** taken orally, provide hormone that is readily absorbed from the gastrointestinal tract. SYNTHROID **Injection** is effective by any parenteral route. Following absorption, the synthetic L-thyroxine provided by SYNTHROID products cannot be distinguished from L-thyroxine that is endogenously secreted. Each is bound to the same serum proteins and each exhibits a six to seven day circulating half-life in the euthyroid individual.

Both SYNTHROID products will provide L-thyroxine as a substrate for physiologic deiodination to L-triiodothyronine. Therefore, patients taking SYNTHROID products will demonstrate normal blood levels of L-triiodothyronine even when the thyroid gland has been surgically removed or destroyed by radioiodine. Administration of levothyroxine alone will result in complete physiologic thyroid replacement.

Indications

SYNTHROID (sodium levothyroxine) products serve as specific replacement therapy for reduced or absent thyroid function of any etiology. SYNTHROID **Injection** can be used intravenously whenever a rapid onset of effect is critical, and either intravenously or intramuscularly in hypothyroid patients whenever the oral route is precluded for long periods of time.

Contraindications

There are no absolute contraindications to SYNTHROID (sodium levothyroxine) therapy. Relative contraindications include acute myocardial infarction, uncorrected adrenal insufficiency and thyrotoxicosis. (See WARNINGS)

Warnings

Patients with cardiovascular diseases warrant particularly close attention during the restoration of normal thyroid function by any thyroid drug. In such cases, low initial dosage increased slowly by small increments is indicated. Occasionally, the cardiovascular capacity of the patient is so compromised that the metabolic demands of the normal thyroid state cannot be met. Clinical judgment will then dictate either a less-than-complete restoration of thyroid status or reduction in thyroid dosage.

Endocrine disorders such as diabetes mellitus, adrenal insufficiency (Addison's disease), hypopituitarism and diabetes insipidus are characterized by signs and symptoms which may be diminished in severity or obscured by hypothyroidism. SYNTHROID (sodium levothyroxine) therapy for such patients may aggravate the intensity of previously obscured symptoms and require appropriate adjustment of therapeutic measures directed at these concomitant disorders.

Thyroid replacement may potentiate the effects of anticoagulants. Patients on anticoagulant therapy should have frequent prothrombin determinations when instituting thyroid replacement to gauge the need to reduce anticoagulant dosage.

Precautions

Overdosage with any thyroid drug may produce the signs and symptoms of thyrotoxicosis, but resistance to such factitious thyrotoxicosis is the general rule. With SYNTHROID (sodium levothyroxine) **Tablets,** the relatively slow onset of action minimizes the risk of overdose but close observation in the weeks following institution of a dosage regimen is advised. Treatment of thyroid hyperactivity induced by oral medication is confined to interruption of therapy for a week, followed by reinstitution of daily therapy at an appropriately reduced dosage.

Adverse reactions

Adverse reactions are due to overdose and are those of induced hyperthyroidism.

Dosage and administration

For most adults, a final dosage of 100 mcg (0.1 mg) to 200 mcg (0.2 mg) of SYNTHROID (sodium levothyroxine) **Tablets** daily will restore normal thyroid function and only occasionally will patients require larger doses. Failure to respond adequately to a daily oral intake of 400 mcg (0.4 mg) or more is rare and should prompt reconsideration of the diagnosis of hypothyroidism, special investigation of the patient in terms of malabsorption of L-thyroxine from the gastrointestinal tract or poor adherence to therapy.

The concomitant appearance of other diseases, especially cardiovascular diseases, usually dictates a replacement regimen with initial doses smaller than 100 mcg/day (0.1 mg).

In otherwise healthy adults with relatively recent onset of hypothyroidism, full replacement dose of 150 mcg (0.15 mg) or 200 mcg (0.2 mg) has been instituted immediately without untoward effect and with good therapeutic response. General experience, however, favors a more cautious approach in view of the possible presence of subclinical disorders of the cardiovascular system or endocrinopathies.

The age and general physical condition of the patient as well as the severity and duration of hypothyroid symptoms determine the starting dosage and the rate of incremental dosage increase leading to a final maintenance dosage. In the elderly patient with long standing disease, evidence of myxedematous infiltration and symptomatic, functional or electrocardiographic evidence of cardiovascular dysfunction, the starting dose may be as little as 25 mcg (0.025 mg) per day. Further incremental increases of 25 mcg (0.025 mg) per day may be instituted at three to four week intervals depending on patient response. Conversely, otherwise healthy adults may be started at higher daily dosage and raised to the full replacement dosage in two to three weeks. Clearly it is the physician's judgment of the severity of the disease and close observation of patient response which determines the rate of dosage titration.

Laboratory tests to monitor thyroid replacement therapy are of limited value. Although measurement of normal blood levels of thyroxine in patients on replacement regimens frequently coincides with the clinical impression of normal thyroid status, higher than normal levels on oral replacement of levothyroxine occasionally occurs and should not be considered evidence of overdosage per se.

In all cases, clinical impression of the well-being of the patient takes precedence over laboratory determination in determining the appropriate individual dosage.

In infants and children, there is a great urgency to achieve full thyroid replacement because of the critical importance of thyroid hormone in sustaining growth and maturation. Despite the smaller body size, the dosage needed to sustain a full rate of growth, development and general thriving is higher in the child than in the adult, as much as 300 mcg (0.3 mg) to 400 mcg (0.4 mg) per day.

In myxedema coma or stupor, without concomitant severe heart disease, 200 to 500 mcg of SYNTHROID **Injection** may be administered Intravenously as a solution containing 100 mcg/ml. Although the patient may show evidence of increased responsivity within six to eight hours, full therapeutic effect may not be evident until the following day. An additional 100 to 300 mcg or more may be given on the second day if evidence of significant and progressive improvement has not occurred. Like the oral dosage form, SYNTHROID **Injection** produces a predictable increase in the circulating level of hormone with a long half-time. This usually precludes the need for multiple injections but continued daily administration of lesser amounts intravenously should be maintained until the patient is fully capable of accepting a daily oral dose.

In the presence of concomitant heart disease, the sudden administration of such large doses of L-thyroxine intravenously is clearly not without its cardiovascular risks. Under such circumstances, intravenous therapy should not be undertaken without weighing the alternative risks of the myxedema coma and the cardiovascular disease. Clinical judgment in this situation may dictate smaller intravenous doses of levothyroxine.

SYNTHROID **Injection** by intravenous or intramuscular routes can be substituted for the oral dosage form when ingestion of SYNTHROID **Tablets** is precluded for long periods of time.

How supplied

SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in 6 concentrations: 25 mcg (0.025 mg)—orange . . . 50 mcg (0.05 mg)—white . . . 100 mcg (0.1 mg)—yellow . . . 150 mcg (0.15 mg)—violet . . . 200 mcg (0.2 mg)—pink . . . 300 mcg (0.3 mg)—green. Depending on strength, these tablets are available in bottles of 100, 500, 1000 and 5000.

SYNTHROID (sodium levothyroxine) for **Injection** is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, U.S.P. A separate 5 ml vial containing Sodium Chloride Injection, U.S.P. is provided as a diluent.

Directions for reconstitution

Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml of the Sodium Chloride Injection, U.S.P. to the vial. Shake vial to insure complete mixing. **Use Immediately** after reconstitution. Discard any unused portion.

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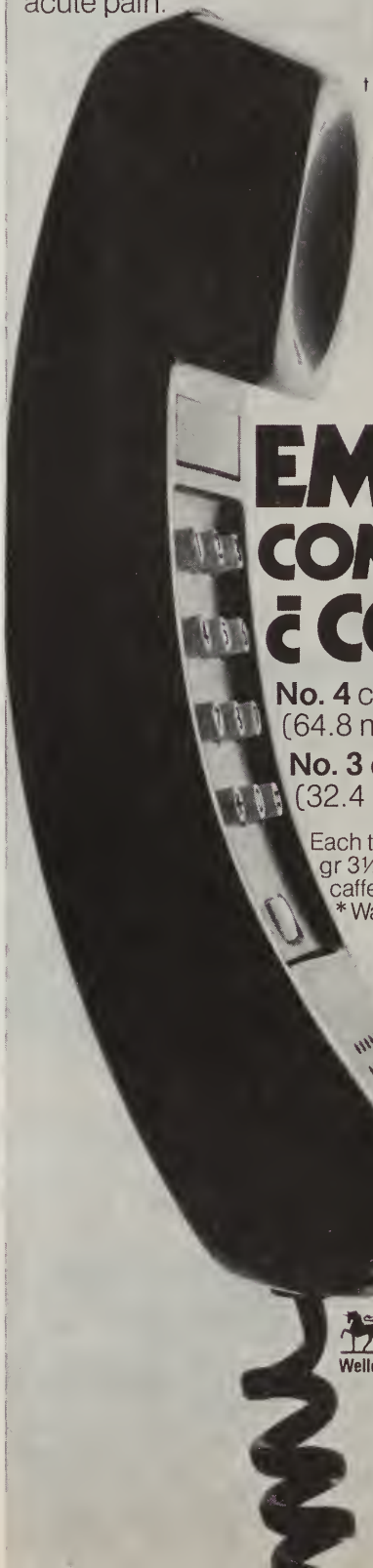
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In Memoriam

A. L. COOPER, M.D.
Somerset
1900-1975

A. L. Cooper, M.D., a general surgeon practicing in Somerset, died on July 22 at the age of 75. A 1933 graduate of Rush Medical College, Doctor Cooper was a former member of the Board of Directors of Kentucky Physicians Mutual. He had been an emeritus member of the Kentucky and American medical associations since 1971.

JESSE J. MARTIN, M.D.
Tompkinsville
1915-1975

Jesse Jack Martin, M.D., 59, a Monroe County physician and surgeon for 29 years, died on August 3. A 1943 graduate of the University of Louisville School of Medicine, Doctor Martin was formerly a member of the Kentucky and American medical associations.

WANTED: HEALTH OFFICER

Health Officer wanted for Floyd County (4/5) and Martin County (1/5) in Eastern Kentucky. If interested contact:

James B. Goble, Administrator,

Floyd County Health Department,

Prestonsburg, Kentucky 41653

Call (606) 886-2788

KMA Annual Meeting

September 23-25

Ramada Inn/Bluegrass Convention Center
Louisville

PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

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Data on file at Roerig.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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The Journal of The
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KENTUCKY THORACIC CONFERENCE PAPERS

Tuberculous Meningitis
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Significant Determinations in the Acquisition of and Response to Pulmonary Infections
James W. Smith, M.D.

Infection Vs. Home Therapy in COPD
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

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Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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We could draw pretty word pictures about Miami—the scintillating beaches, the glamorous hotels, the superb cuisine, the intriguing spots to visit, the unequaled vacationland—but we won't. You'll have to find out for yourself.

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Journal of The KENTUCKY Medical Association

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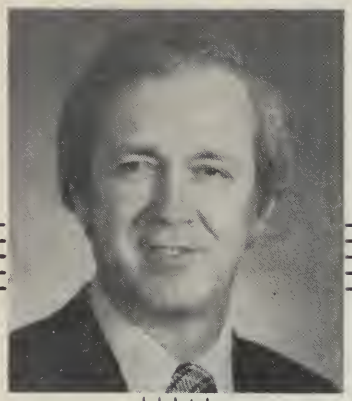
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MESSAGE FROM THE PRESIDENT



As my first act on this written page of *The Journal,* I would like to express my appreciation to the members for the honor bestowed upon me, having been elected President of the Kentucky Medical Association.

The past few years have been fraught with difficult times, controversial decisions and events which have threatened to divide our honored profession. It is hoped that in the year to come, unity in thought and purpose will be our goal. I pledge to you my untiring efforts to this purpose.

Among the most important issues facing Kentucky medicine today is the problem of "malpractice crisis". At no other time is the unity of the profession more needed than during the next few months when this vital issue must be faced squarely by the public and ourselves.

The problems related to Medicaid must be ironed out and continuing medical education will certainly occupy a great deal of our efforts.

A plea for each member's cooperation, understanding and prayers throughout the forthcoming year is earnestly made by your President.

David A. Shaw

A Link in the Chain

auxiliary



I take pride in serving as President of the Auxiliary to the Kentucky Medical Association. Membership in the auxiliary is to me a responsibility as well as a privilege. Our organization is a strong and purposeful one, with the potential to improve health care in Kentucky through the volunteer resources of our talented and skilled members.

In 1975-76, we as a nation are celebrating our Bicentennial. The Ephraim McDowell Shrine is a reminder to us of the rich medical heritage we have in our state. This landmark maintained by KMA and supported by the Auxiliary will be the focus of our Fall Board Meeting, November 11 and 12. Urge your wife to attend!

In evaluating the present, I must list for you the objectives of our organization. They are to assist the KMA in its program for the advancement of medicine and health education, to coordinate and advise concerning the activities of the component auxiliaries, and to cultivate friendly relations and promote mutual understanding among physicians' families. In some areas, we have done well this past year. Donations to the AMA-ERF totaled $13,863.09 and over $25,000 was given by the component auxiliaries in scholarships and loans for health-related vocations.

The auxiliary gives the doctor's wife a unique place where she can learn, study and prepare herself with the help of others for her role as a volunteer leader in the community. Through the programs and projects we can combine the ideas, desires and energies of all our members to effectively bring changes where they are needed. By WORKING TOGETHER we build understanding.

Last year membership increased to 1,452, but with 2,678 active members in the KMA, many potential members have not been reached. If your wife is not a member, please encourage her to join the local auxiliary. If you live in a county where there is no auxiliary she may join as a MAL (member at large). Join us! We can do more together.

A new project has been added which involves assisting the Kidney Foundation by speaking before civic and service groups in our communities. This project will accomplish two things: 1) inform our communities of how, through the uniform donor act, they can donate an organ after death and 2) place the Auxiliary before the public with a message of concern.

Auxiliary is working together to improve understanding. Auxiliary is serving a need. Let us join hands and show our community, state and world that physicians' families are WORKING TOGETHER as committed, concerned citizens taking action to improve health care for all.

MRS. WALLY MONTGOMERY, PRESIDENT
WOMAN'S AUXILIARY TO KMA

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NEOSPORIN® Ointment
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is a famous fighter, too.

Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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15-16 "Newer Concepts in Allergy and Immunology,"** Health Sciences Center, University of Louisville, Louisville

29 "Thromboembolis Disease—Investigation and Management,"** St. Anthony Hospital, Louisville

30-Nov. 1 11th Annual Bronson Course in Diagnostic Ophthalmic Ultrasound,** Health Sciences Center, University of Louisville, Louisville

NOVEMBER

3-4 "Endometrial Carcinoma and Its Treatment," American Cancer Society, Kentucky Division. Twenty-five outstanding national and international speakers. Galt House, Louisville. For registration write: Laman A. Gray, Sr., M.D., Children's Foundation Building, 601 South Floyd Street, Louisville 40202.

4-8 National Easter Seal Convention, Galt House, Louisville

7 Conference on "Early Intervention," sponsored by National Easter Seal Society, Galt House, Louisville

8-9 KAFP Seminar, Jenny Wiley State Park, Prestonsburg

13-14 11th Annual Symposium on Central Nervous System in the Newborn, Health Sciences Center, University of Louisville, Louisville

20 Symposium on "Allied Health Professional's Role in Management of Rheumatoid Arthritis," sponsored by Kentucky Chapter, Arthritis Foundation, Breckinridge Inn, Louisville

26 "Antibiotic Therapy," **Health Sciences Center, University of Louisville, Louisville

DECEMBER

11 "Electrolyte and Fluid Problems," **Health Sciences Center, University of Louisville, Louisville

19-20 "Rheumatic Disease: Management Options,"*, University of Kentucky Medical Center, Lexington

For further information, contact: Frank R. Lemon, M.D., Associate Dean of Extra-Mural Affairs, UK College of Medicine, Lexington 40506

**For further information, contact: Gerald D. Swim, Director, Office of Continuing Education, UL School of Medicine, Louisville 40202*

IN SURROUNDING STATES

OCTOBER

20-21 Tennessee Valley Medical Assembly, Read House, Chattanooga

23 Postgraduate course, "Dermatology for the Dermatopathologist and Pathologist," Cleveland Clinic Educational Foundation, Cleveland

24-25 Tennessee/Kentucky Regional Meeting, American College of Physicians, Hyatt Regency, Nashville. For information: Gerald Plitman, M.D., 180 Waring Road, Memphis, Tennessee 38117.

26-30 Annual Scientific Assembly, American College of Chest Physicians, Anaheim Convention Center, Anaheim

29-30 Postgraduate course, "Reconstructive Surgery of the Knee," Cleveland Clinic Educational Foundation, Cleveland

NOVEMBER

3-7 "Current Concepts in Pediatric Radiology," sponsored by Duke University Medical Center; Pinehurst Hotel, Pinehurst, N.C.

13-15 "The Critically Injured Patient: Emergency Surgical and Medical Care," sponsored by the American College of Surgeons and Case Western Reserve Medical School; Marriott Inn, Cleveland, O.

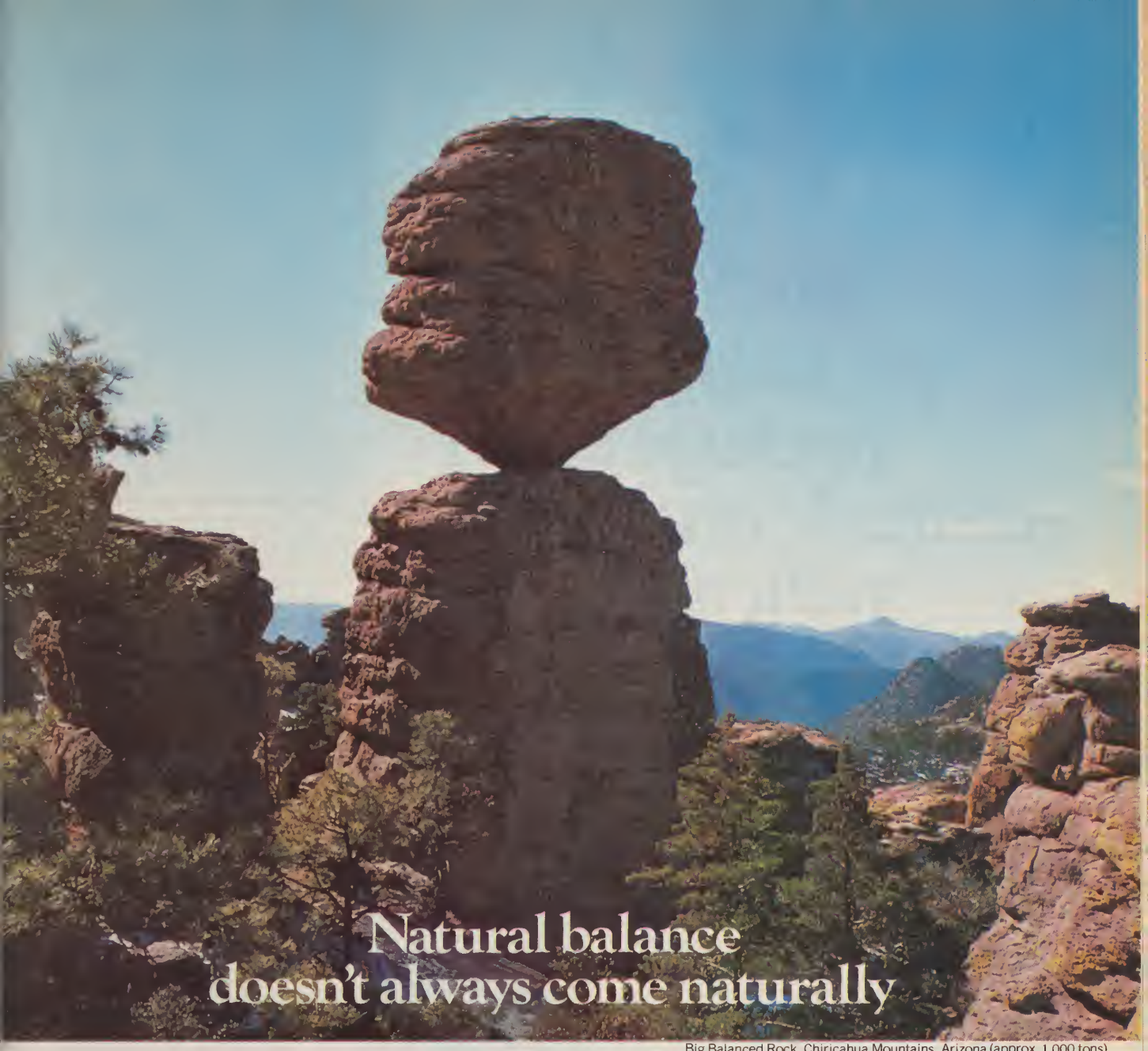
16-19 Annual Scientific Meeting, Southern Medical Association, Miami Beach, Fla.

29-Dec. 4 AMA Clinical Convention, Honolulu

UPCOMING FEATURES

Annual Meeting Details—
November Journal

Digest of House of Delegates—
December Journal



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□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo.*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy. See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
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Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner, Food and Drug Administration

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the



Dr. James H. Sammons
Executive Vice President of the American Medical Association

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the information is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

Pharmaceutical Manufacturers Association
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This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia.** Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

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Solar keratosis is not an uncommon medical problem.

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Solar keratoses are generally not difficult to identify.

These skin lesions are usually multiple, flat or slightly elevated, brownish or red in color, papular, dry, rough, adherent and sharply defined. They are found on areas of the skin having extensive exposure to sunlight. Clinical characteristics of the lesions, their predominant location on exposed surfaces, the age of the patient and his skin type are important considerations in the diagnosis.

Solar keratoses can, and should, be treated because they are potentially premalignant.

Chronic exposure to sunlight frequently leads to degenerative changes in the skin. This can often result in the development of multiple, potentially premalignant keratotic lesions. Therefore, early detection and treatment is advisable.

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Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

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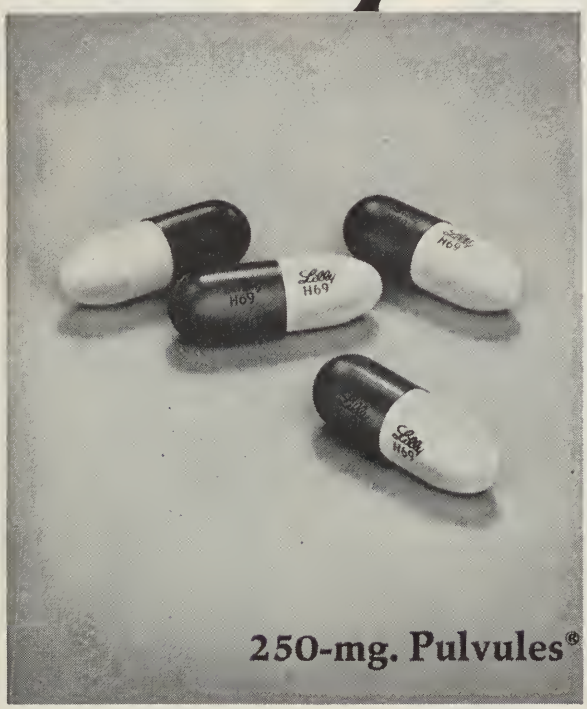
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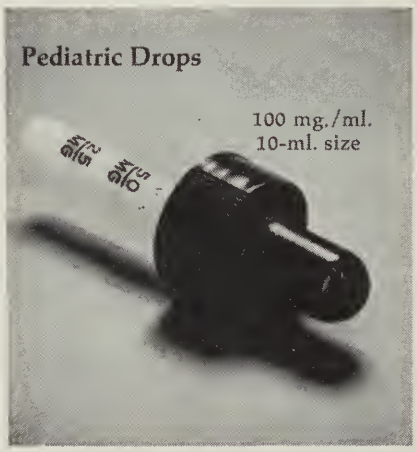
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VOLUME 73 OCTOBER 1975 No. 10

Tuberculous Meningitis†

JUDAH L. SKOLNICK, M.D.*
Louisville, Kentucky

Tuberculous meningitis is all too often thought of as a disease of the past. Six cases in Jefferson County occurred in one year. Features of the disease are reviewed.

FROM October, 1973, through September, 1974, six cases of tuberculous meningitis in Jefferson County are known to the author. Pulmonary and extra-pulmonary tuberculosis are too often thought of as diseases of the past. This can be dangerous and lead to missed diagnoses. The purpose of this paper is to briefly review the six cases and to discuss the presentation, diagnosis and management of tuberculous meningitis.

Cases

Six patients had tuberculous meningitis. Four of the six patients have expired, and two are living. Three of the patients presented with focal neurologic signs. All six, however presented with lethargy, confusion and poor responsiveness.

Patient #1—This patient developed malaise and became unconscious. Tuberculous meningitis was suspected. Because of a negative PPD and negative acid fast stain of the spinal fluid, the diagnosis was ruled out, and a vascular lesion was suspected. The patient expired and the diagnosis was made at autopsy.

Patient #2—This patient presented with what appeared to be a mass lesion in the chest. Spinal fluid findings showed elevated protein and lymphocytosis. The working diagnosis was carcinoma of the lung with carcinomatous meningitis. Anti-tuberculous chemotherapy was started to cover the patient, although the diagnosis was not seriously entertained. The patient went into respiratory failure. Vigorous resuscitation was not initiated, thinking the patient had cancer. He died 24 hours after starting therapy. The diagnosis was made at autopsy.

Patient #3—This was an elderly male with the diagnosis of carcinoma of the prostate. He was thought to have lymphangitic metastasis of the carcinoma to his lungs. Spinal fluid showed elevated protein and lymphocytosis. Anti-tuberculous therapy was begun. The patient's lungs began to clear after about three weeks of treatment. The patient expired four weeks after treatment was started due to a generalized debilitated condition. CSF culture was positive for M. Tuberculosis.

Patient #4—This patient presented with meningitis. No organism was recovered and the patient was not treated for tuberculosis. The diagnosis was made at autopsy.

Patient #5 and #6—Both patients presented with aseptic meningitis. Anti-tuberculous therapy was started. Cultures in both patients

†*Presented at 1974 Fall Conference, Kentucky Thoracic Society, October 4-5, Louisville*
**Assistant Professor of Medicine, University of Louisville School of Medicine*
Received at KMA: 6-26-75

were subsequently positive. Both patients are still alive. Patient #5 has a residual neurologic deficit. Patient #6 is currently hospitalized and under treatment.

Discussion

Clinical Presentation: Tuberculous meningitis most often arises in the course of generalized hematogenous dissemination, usually from a lung primary. The dissemination may be clinically manifest, as in acute generalized miliary tuberculosis, or more insidious. Clinical signs of focal CNS involvement may be slight or absent. Permanent neurologic disability may be caused even though the infection is eventually controlled or eradicated. Tuberculous meningitis is reportedly most frequent in infants and young children, but may occur at any age. Clinical signs are the same as any type of meningitis. Fever occurs, but is not necessarily high. Death usually occurs 3-4 weeks from symptomatic onset or sooner.

Diagnosis: PPD skin test is usually negative. Diagnosis is made via the spinal fluid. The pressure is usually increased. There is a pleocytosis from 10-25 up to several hundred cells. Lymphocytes usually predominate. Polys may infrequently be present. The protein is elevated. Sugar is characteristically reduced, but the reduction may be slight or the sugar may be normal. Chlorides are normal or reduced. Direct smear of the CSF is almost always negative. Smear of the pellicle formed on standing may rarely be positive. Diagnosis is made by culture, however, this takes four to six weeks, so that if the diagnosis is not suspected the patient is usually dead at the time of diagnosis.

Treatment: Standard treatment for adult is INH, 10 mgm per kg daily for the first three or four weeks. Dosage may then be reduced to 5 to 7 mgm per kg. Streptomycin, 1 gm IM daily is the second drug. This should be continued from three to six months or until CSF is normal. It may then be reduced to two or three times weekly for another year. In all but the earliest cases, corticosteroids should be used in the equivalent of 80 mgm per day of Prednisone in divided doses. Intrathecal therapy is rarely necessary. Streptomycin cannot be given intrathecally. INH diffuses well from the blood stream and need not be given intrathecally.

As a rule a third drug is not needed, but PAS has been used. With the advent of the newer anti-tuberculous drugs, Ethambutal and Rifampin, their use in this disease has been questioned. There are no good clinical studies using either drug in tuberculous meningitis. Rifampin has been demonstrated to give good CSF levels *in vitro* and *in vivo* and could be used. Ethambutal is uncertain.

Summary and Conclusions

Six cases of tuberculous meningitis known to one physician in Jefferson County have been presented. Four died and two lived. It is the author's opinion that all patients with aseptic meningitis with CSF findings of low cell count, low or normal sugar, high protein and low or normal chloride should be considered as tuberculous meningitis until proven otherwise.

Physicians need to "think tuberculous meningitis."

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Significant Determinants in the Acquisition Of And Response to Pulmonary Infections†

James W. Smith, M.D.*
Dallas, Texas

Various host factors, environmental determinants and microbial factors can have an effect on the acquisition of lower respiratory infections as well as the response to the infection.

RESPIRATORY tract infections are the most common illnesses in children and adults, accounting for more than 80% of the illnesses a person has in a given year. Most of these represent upper respiratory tract infections. Various factors contribute to the development of lower respiratory infections, including various host factors, environmental determinants and microbial factors. These factors can have an effect both on the acquisition of infections as well as the response to the infection. It is important that health personnel involved in management of such individuals appreciate these determinants and attempt to change those factors that can be changed. In this way, we can lower the morbidity and mortality of pulmonary infections.

Category 1: Factors Which Enhance Acquisition of Pulmonary Infections

A. Host Factors. The principal high risk host factor in various studies relates to the extreme of ages.[1] Both the neonate and the elderly (greater than 60 years of age) are very susceptible to pulmonary infections and have significant morbidity and mortality associated with these. One major cause for the high infant mortality rate in the United States is the development of pulmonary infections in neonates born of mothers in certain high risk groups, such as those with premature rupture of membranes. Also, premature infants who require mechanical assistance and individuals with pulmonary hyaline membrane disease are at risk from acquiring hospital-associated gram negative infections. Certain organisms predominate in the neonate, including *Escherichia coli* and *Staphylococcus aureus,* both of which can be acquired from residing within the hospital and represent significant infection control problems in most nurseries.[1,2] Recently, the unusual susceptibility of neonates to particular organisms such as *E. coli* and group B streptococcus has been shown to relate to the virulence of the polysaccharide moiety of these organisms (K 1 antigen in *E. coli*) in causing meningitis.[2]

Significant pulmonary infections have traditionally been noted in the elderly, particularly in those who are debilitated, and in those who have chronic obstructive pulmonary disease or other underlying diseases. Pneumonia has been termed the "old person's friend", although it must be seen as a rather unwelcome visitor. The elderly who are susceptible to pulmonary infections relate to various virulent organisms which are predominant in the elderly, including type III *Pneumococcus, Staphylococcus,* and gram negative infections, all of which are relatively less common in individuals under 50 years of age.[3] This unusual susceptibility has been postulated to reflect impaired host response mechanisms such as either cellular or humoral immunity. Certain evidence exists to indicate that cellular immunity, in particular, is impaired although antibody response to enteric organisms may also be diminished.[4,5] One would anticipate that with time one would accumulate antibodies that would protect against a wide variety of organisms. Hence, the more likely explanation for the unusual susceptibility to infection may reside with mechanical features such as inability to clear secretions or poor cough reflex.

†*Presented at 1974 Fall Conference, Kentucky Thoracic Society, October 4-5, Louisville*
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Another important determinant in the acquisition of particular pulmonary infections is the sex of the person. Many studies show that particular infections with bacterial agents, such as the pneumococcus and klebsiella are increased threefold in males.[3,6] The principal explanation may be underlying disease such as chronic obstructive lung disease secondary to the smoking history since in the past fewer women have smoked than men. Fungus infections, other than Candida, are distinctly uncommon in females either as progressive pulmonary disease or as disseminated disease.[7] This is true in females with no underlying disease and even in those receiving immunosuppressive therapy, since systemic fungal infections following renal transplantation were much more common in males than in females and accounted for the excess mortality sustained by males.[8] In general, progressive pulmonary disease with most fungi occurs primarily in males over 40 who have underlying pulmonary disease. This increased prevalence does not reflect occupational exposure alone. In epidemics involving both males and females with both histoplasmosis and with coccidioidomycosis, rarely does disseminated disease develop in females.[9,10] Females more commonly develop erythema nodosum which reflects an enhanced host immune response. An exception exists in pregnancy during which infections with viruses as coxsackie A or coccidioidomycosis are associated with a significant mortality.

B. Environmental Factors. It has long been recognized that certain environmental factors such as crowding leads to increased respiratory infections. This is particularly noted with certain respiratory infections in military recruits during periods of the buildup early in military conflicts as illustrated by increased meningococcal disease. Also, in lower social economic groups where excessive crowding exists, epidemics such as meningococcemia occur, as recently shown in Brazil.[11] Furthermore, the size of the family appears to be an important determinant of infections with certain organisms, although the frequency of respiratory infections in children between one and three years of age is the same no matter how large a family (approximately 9 to 10 upper respiratory infections per year). One area of recent concern has been that children placed in day care centers will have an unusual susceptibility to more infections. However, in a virus watch study, the frequency of infections in a day care center was no different than that noted in studies of a similar population group in the community.[12]

The hospital environment has always been considered a possible threat to both patients as well as personnel. Only in this century have hospitals become a safe place for both patients and employees as public health practices have improved and it has been recognized that diseases can be contagious in the hospital. The predominant present concern is the acquisition of gram negative infections by ill, hospitalized individuals. Recently, Johansson and co-workers have studied those factors (Table 1) which account for the acquisition of gram negative organisms within a hospital.[13] Of significance those patients in a medical intensive care unit who became colonized (comprising 40 percent) consisted of those who were comatose, hypotensive, acidotic or azotemic. Iatrogenic factors included therapy which reduced white count below 4,000/mm^3, tracheal intubation or the administration of antimicrobial drugs. Of particular interest is the fact that individuals who had intermittent positive pressure breathing treatments were *not* more frequently colonized. Thus, certain individuals are prone to increased colonization with gram negative organisms and perhaps little can be done to prevent this, especially since these individuals have had life sustained by heroic ventures by physicians or respiratory therapists which then increases susceptibility to gram-negative infections.

C. Underlying Disease. Various factors adversely affect the clearance of bacteria from the respiratory tract. These include alcohol, dehydration, acidosis, pulmonary edema and viral infection.[14] These factors work on clearance by either of two mechanisms: 1) by impairing the

Table 1

SIGNIFICANT VARIABLES IN COLONIZATION WITH GRAM-NEGATIVE BACILLI[13]

Patient Factors:
Coma
Hypotension
Arterial pH $\leq$ 7.3
BUN $>$ 50 mg%
WBC $\geq$ 15,000
Iatrogenic Factors:
Tracheal Intubation
Antimicrobial Drugs
WBC $\leq$ 4,000

clearance by alveolar macrophages, the prominent clearance determinant in the lung or 2) by enhancing the multiplication of bacteria. The latter has been shown to occur in pulmonary edema which increases the doubling time of organisms.[15] Viral infections have been noted frequently to precede pneumococcal pneumonia and increased pneumonia obviously occurs following influenza epidemics.

Probably the most significant factor enhancing the acquisition of pulmonary infections is obstructive pulmonary disease. This can be acute obstruction following the aspiration of solid objects such as peanuts or coins by children less than three years of age. That this is an ancient problem was documented recently by an autopsy performed on a Peruvian mummy in which the likely cause of death was shown to be aspiration of teeth which led to an acute infection.[16] Such events can occur in adults, as illustrated by the case of the veteran who presented with pneumonia (Fig. 1) which failed to clear rapidly. At bronchoscopy, an object was removed which was determined to be a peanut (Fig. 2). He then gave the history of having had coughing paroxysms a year earlier while eating peanuts on a long automobile trip from El Paso to Dallas. Thus, in both children and adults, obstruction due to a solid object should be considered in recurrent pneumonia.[1] Recurrent pneumonia can exist either



FIG. 1. Chest X-ray from patient with pneumonia secondary to peanut.

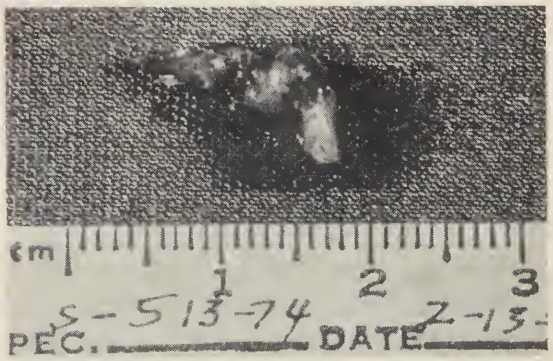


FIG. 2. Peanut obtained from bronchial tree at time of bronchoscopy from patient with pneumonia.

because of local thoracic problems such as chronic obstructive disease or be secondary to extra-thoracic disease, such as alcoholism, diabetes or immunological abnormalities. Children with immunological impairment have either impaired cellular immunity which predisposes them to viral or fungal infections or humoral immunity defects such as agammaglobulinemia which predisposes them (after 6 months of age) to infections with extracellular encapsulated organisms such as the pneumococcus, hemophilus and rarely the staphylococcus. Most adults with immunological disorders have other diseases such as lymphoma or myeloma.[18] Rarely adults are seen with hypogammaglobulinemia, so that immunoglobulin levels (IgG, IgM, IgA) should be obtained in individuals who present with recurrent pneumonia. These individuals should also be evaluated for myeloma.[19] There has been a sharp increase in infections in individuals with low polymorphonuclear leukocyte count (less than 1,000 per person^3). Certain organisms predominate as the causative agent, including Pseudomonas species, opportunistic fungi, such as *Candida* or *Aspergillus,* protozoa as Pneumocystis as well as other relatively uncommon organisms. Thus, the approach to the compromised host (Table 2) is somewhat different than that used in otherwise healthy persons who present with pulmonic infiltrates.[20]

Category 2: Factors Which Affect Response

A. Host Factors. Not only are the neonate and the elderly more susceptible to infection, but they also respond less well to the infection with significant higher mortality rates.[1-3] When mortality rates in the pre-antibiotic period are compared to the present rates, there has been a

much smaller decline in the case fatality rates following the acquisition of pneumococcal pneumonia in the elderly than in age group 20-50.[3] Mortality rates with *E. coli* infection in the neonate remain quite high.[2] Factors which have an adverse effect on the response to pulmonary infection include impaired mechanical function, as in the debilitated neonate or elderly, impaired polymorphonuclear leukocyte function as in the compromised host, and impaired lymphocyte or cellular immune function in patients with lymphoma. Also, increased mortality has been noted in certain groups including those individuals with congestive heart failure, malignancy, renal failure and acidosis.[3] More is required than antimicrobial agents since pulmonary infections continue to have high mortality in the elderly and a poor response is noted to drugs such as gentamicin. When polymorphonuclear leukocyte counts are low such infections respond better to penicillin relatives (i.e., carbenicillin). In contrast, individuals with alcoholism or hypogammaglobulinemia who have recurrent pneumonia respond well to treatment of the infection.[17] Certain individuals with underlying disease such as alcoholism do not have a delayed resolution of pneumonia (pulmonary infiltrate persisting by X-ray longer than one month), whereas the elderly and patients with diabetes mellitus do have a predisposition to delayed resolution of pneumonia.[21] Thus, the outcome of the infection is determined to a certain extent by underlying disease in patients with pneumonia.

B. Microbial Factors Which Affect Response. Pulmonary infections with certain organisms have been noted to have a significant mortality rate, including type III pneumococcus,[3] staphylococcal pneumonia,[22] Klebsiella pneumonia[6] and gram-negative infections occurring in the hospitalized patients.[13] All these infections have a propensity to develop in the elderly or in individuals with underlying disease. Also, high mortality rate has been noted in infants under one year of age with respiratory syncytial virus. This viral infection appears to be worse in children with maternal antibody which leads to a marked inflammatory reaction in the lung.[1] Also, particular complications are noted with certain organisms: the frequent development of empyema and pneumothorax with staphylococcal[22] and empyema with streptococcal pneumonia[23] and empyema and lung abscess with anaerobic pneumonia.[24] Treatment must include appropriate surgical drainage as well as appropriate antimicrobial therapy.

Category 3: Preventive and Therapeutic Aspects

Pulmonary infection will doubtless continue to be the most common cause of infections for which patients present themselves to physicians. Certain community-wide and hospital ventures can be undertaken which can change those factors responsible for the acquisition of infection. We have detailed in the review certain of the high risk categories. Public health measures would include preventing such conditions as overcrowding in lower socio-economic groups which lead to enhanced susceptibility and promote programs that encourage activity in the elderly. The campaign to prevent smoking already implemented by the Kentucky Thoracic Society would work to prevent obstructive pulmonary disease and thereby lessen

Table 2

INTEGRATED DIAGNOSTIC APPROACH TO COMPRISED HOST

	Hodgkin's Disease	Leukemia	Multiple Myeloma
Cellular Defects	T Cell	Granulocyte	B Cell
Pathophysiological Mechanism	↓ Cellular Immunity	↓ Phagocytosis	↓ Phagocytosis
Infections			
Bacterial	Mycobacteria	Gram Negative Bacteria (Pseudomonas)	Gram Positive Bacteria (Pneumococcal)
Fungal	Cryptococcal	Candida, Aspergillus	—
Protozoal	Pneumocystis carinii, toxoplasmosis	Pneumocystis carinii toxoplasmosis	—
Viral	Cytomegalovirus Herpes virus	Cytomegalovirus	—

pulmonary infections. Community rehabilitation programs which treat the alcoholic who have high prevalence rates of pulmonary infections should be encouraged by health personnel. Since significant mortality follows influenza epidemics, those who have underlying disease should be immunized in the fall of each year. Since individuals receiving immunosuppressive therapy have pulmonary infections, physicians should educate patients to return upon the development of any febrile episode. Immunological defects such as hypogammaglobulinemia should be considered in those with recurrent infection. Hospitalized patients who are intubated and receiving chemotherapy should be monitored for hospital-associated infection. Much remains to be accomplished; however, many of the significant determinants of pulmonary infection are known. All health personnel who care for patients with pulmonary disease can approach these patients with assurance if the fundamental determinants are recognized.

Acknowledgement

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Infection Vs. Home Therapy in COPD†

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UNTIL recently, patients with chronic obstructive pulmonary disease (COPD) faced long periods of hospitalization, then transfer to a nursing home, or were faced with a shortened life expectancy. Now, after a brief period of stabilization, they are discharged with home oxygen, IPBB machines and medication. Along with these changes come new dimensions in home health care.

If home oxygen is indicated and the patient is an acceptable candidate, the physician is responsible for filling out the forms indicating the flow and frequency of oxygen, specific general orders, medications and any equipment needed.

Ideally, these patients have received some instructions before discharge, but they need reinforcement, supervision, someone to coordinate their care, plus a great deal of emotional support. This responsibility is usually delegated to the Visiting Nurse who has had special training in these areas. In addition, in-service programs and continuing education keeps the nurse up to date.

Most of these patients use oxygen per nasal cannula which delivers a low to moderate concentration of oxygen (25-40 per cent). The cannula is a loop of plastic tubing with two projections that fit into the nostrils. The rate of flow is usually 2-3 L/M P.R.N. during the waking hours and continuously at night. Oxygen and equipment, such as pressure gauge, flow meter, humidifier, tubing, etc., can be secured in various ways, as through the Vocational Rehabilitation services, state Medical Assistance, Medicare or through private insurance.

After the referral is made and the plan of care received, the district nurse makes her first visit. A thorough assessment is made and care structured according to the home situation. This is extremely important, as roughly 75 per cent of these patients are poorly educated and in a low socio-economic class. Because of this, all instructions, procedures and equipment must be kept as simple as possible. Our primary goal is to prevent infection, and by accomplishing this, we can keep this person in his home environment.

Once the patient obtains the necessary equipment, he and the family are taught proper care and cleaning of the equipment. Pressure gauge and flow meters are dusted and cleaned daily. The nasal cannula is washed with soap and water, and ideally should be replaced every one to two weeks. The humidifier must be washed daily with soap and water and sterile distilled water added. The water fill line is clearly marked and the patient is told never to let the humidifier run dry. Compressed oxygen contains no moisture and is very drying to the membranes. Proper use of the valves, flow regulators and method of cracking the tank is stressed. Special emphasis is placed on always turning the tank valve off or on first before adjusting the flow meter. They are taught how to change the tanks, how to adjust the flow of oxygen and how to read the gauges. It is stressed that they should always turn the tank valve off in addition to the flow meter when the oxygen is not in use, and not just turn off the flow meter. This is a favorite short cut for trips to the bathroom or dinner table, and can be very dangerous.

Coughing and deep breathing are encouraged on a regular basis. Here it might help to use diagrams to show how the lungs function, thus helping the patient understand the necessity of the procedures. He is asked to breathe deeply using the abdominal muscles. After a few deep breaths, have him take a deep breath, hold it a second then expel it forcibly. This is repeated three or four times. By carrying this procedure out faithfully every two hours, he can help expand his lungs properly and clear secretions from the bronchi.

Postural drainage is also employed if needed. Pictures and diagrams can be given to the

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family illustrating effective positions for postural drainage.

IPPB therapy may also be ordered t.i.d. to produce mechanical broncho-dilation. This machine will deliver oxygen and air under pressure during inspiration to assist ventilation. Broncho-dilators and mucolytic agents usually are ordered to ease in expelling secretions. Instructions or supervision here includes proper dosage and administration, possible side effects and again thorough cleaning after each use.

The majority of our patients are maintained on several medications, one of them an antibiotic for p.r.n. use. The patient is instructed to take the antibiotic (usually a tetracycline) on a q.i.d. schedule for 10 days if the sputum becomes yellowish or greenish. Enforcement of this is a must for the treatment to be effective. Diuretics and digitalis are also quite common as these patients usually have associated cardiovascular problems.

The nurse must be very forceful here and educate the family as well as the patient to the dangers of using patent medicines, nebulizers, etc., or even worse—taking each other's medications.

Emphasis must also be placed on sanitation and waste disposal. Paper bags are pinned to the bed and tissues used to prevent infection and cross contamination. Family members with colds, flu or upper respiratory infections are urged to stay away from the patient. Influenza vaccine is also advised, as respiratory infections can often be fatal to these persons.

Safety factors play a very important role in our care plans. Signs are placed on the door stating oxygen is in use. The house is checked for open flames, frayed electrical cords and cigarette smokers. While in use, the cylinders should be strapped to the bed to prevent falling. There should be a cool area to store extra cylinders, away from radiators or heaters.

Activity is planned within the patient's tolerance, walking being the most common form of exercise. This not only aids in circulation but promotes better breathing and gas exchange. Oftentimes an extended piece of tubing is utilized to assist a mother in caring for her children. In this way she is not confined to one small area. Air conditioners are quite beneficial but usually financially impossible for these people. They are also alerted to air pollution and when to stay indoors.

In addition to preventing infection, our nurses must meet the total needs of their patients which include social and psychological problems. This sudden and drastic change of living habits is very frightening to say the least. The nurse must be understanding yet firm, simple yet thorough, wise enough to motivate the patient, yet keep him within his limitations. Finally, she must be aware of the various agencies which may be able to assist this family in their time of need.

After the nurse feels the patient and family understand the necessary care and responsibilities, she schedules follow-up visits for supervision and to handle individual problems as they arise. Each patient attends a clinic on a regular basis so his physician can re-evaluate his condition. Once a month the nurse, the attending physician, the social worker and any other involved persons have a conference on each patient. In between nursing visits and conference times, the patient is encouraged to call the nurse if problems arise or go directly to the emergency room. In this way there is continuity of care and the opportunity to give each patient the best possible care.

The Visiting Nurse Association in Louisville became active in this field approximately three years ago through the efforts of the Pulmonary Clinic at Louisville General Hospital. The results have been very rewarding for both the patients and the staff.

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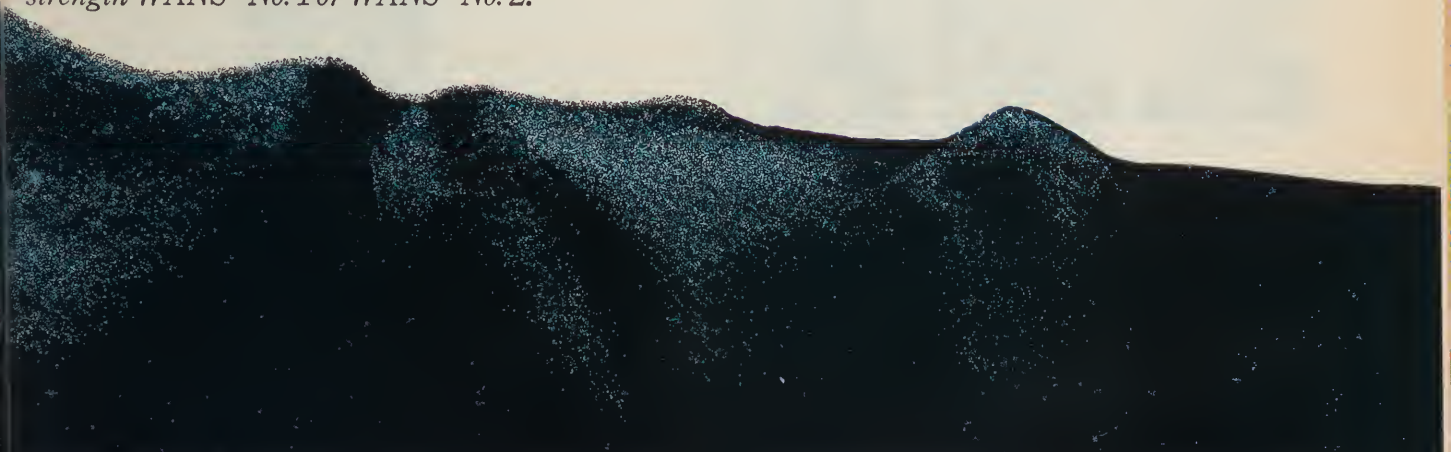


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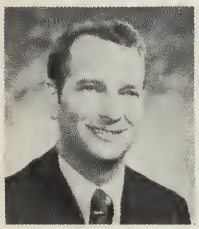
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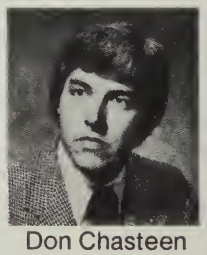
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EDITORIAL

School-House Viewpoint

INCREASING direct governmental participation in education is clearly evident. Witness the decision-making process leading to the Jefferson County busing program. Governmental participation of an indirect sort is nothing new in medical education and, more or less, has been in proportion to the amount of governmental support of schools. With an increasingly large part of the bill for medical education paid for out of the public coffers, it may be argued that the "public" through elected officials should ultimately determine medical educational policies, for example, admissions, curriculum, tuition payback through service, residency allocation, etc.

Most of us would agree to some extent that there is room for improvement in some of these areas of the educational process. (cf. Doctor Overstreet's editorial in the September issue of this *Journal.)* In all of the discussions about the inadequacies of present-day medical education, several things have thus far defied adequate definition: namely, Who is an ideal medical school candidate? What constitutes the ideal curriculum? What is the ideal finished product of the health education process? Sometimes we are led to believe that physicians today represent a woefully inadequate group of health care distributors, miserably trained and arbitrarily chosen for their profession.

We would fervently hope that if major changes are made in the total medical education program, that they are made with reasonable anticipation of subsequent improvement in health care —better trained medical and paramedical personnel, adequately distributed, and appropriately attuned to the needs of a health-oriented clientele (the health consumer who realizes that maintenance of good health is to a considerable degree a personal responsibility).

Appropriate change might best be considered after **all** concerned elements had been heard— the public, the educators, the government and certainly the health care distributors. Though perhaps available, I have not seen a recent in-depth survey of the practicing physicians of this state regarding their viewpoints on medical school admission practices, curriculum relevance, health manpower distribution, etc. Such a survey may well be in order—and soon.

GRS

Interprofessional Code

ON page 559 of this issue, at the request of the KMA Board of Trustees, *The Journal* is publishing a slightly revised version of the Interprofessional Code which has been approved by both the Kentucky Medical Association and the Kentucky Bar Association. We suggest that you clip and file this Code among your professional papers, as in the present social climate such information may well be of assistance to any one of us at one time or another. WH

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IMPORTANT INFORMATION: *This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdosage or individual hypersensitivity, reactions similar to those alter meperidine or morphine overdosage may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Nalline® (nalorphine HCl) or Narcan® (naloxone HCl) or may be evidenced as late as 30 hours after ingestion. LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.*

Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with special caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis. In severe dehydration or electrolyte imbalance, withhold Lomotil until corrective therapy has been initiated.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage. Use with care in patients with acute ulcerative colitis and discontinue use if abdominal distention or other symptoms develop.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing, hyperthermia, tachycardia and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria, paralytic ileus, and toxic megacolon.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be *as* low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, hyperthermia, tachycardia, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. A narcotic antagonist may be used in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

SEARLE **Searle & Co.**
San Juan, Puerto Rico 00936

Address medical inquiries to:
G. D. Searle & Co.
Medical Department, Box 5110,
Chicago, Illinois 60680

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Diarrhea can hook anyone. When it does, physicians and patients both want prompt control of diarrheal symptoms. Lomotil will usually control diarrhea promptly.

This rapid action can halt the emergency aspect of diarrhea and is comforting and reassuring to the patient. Electrolyte and fluid losses can be corrected while the specific cause of the diarrhea is being determined. If an infective agent is the cause, appropriate specific therapy should be given along with Lomotil.

Lomotil is contraindicated in children less than 2 years old.

Lomotil®

TABLETS/LIQUID

Each tablet and each 5 ml. of liquid contain: diphenoxylate hydrochloride 2.5 mg. (Warning: May be habit forming), atropine sulfate 0.025 mg.

holds the line.

In hypertension,
ALDOMET® (METHYLDOPA|MSD)
usually offers more than effective lowering of blood pressure...

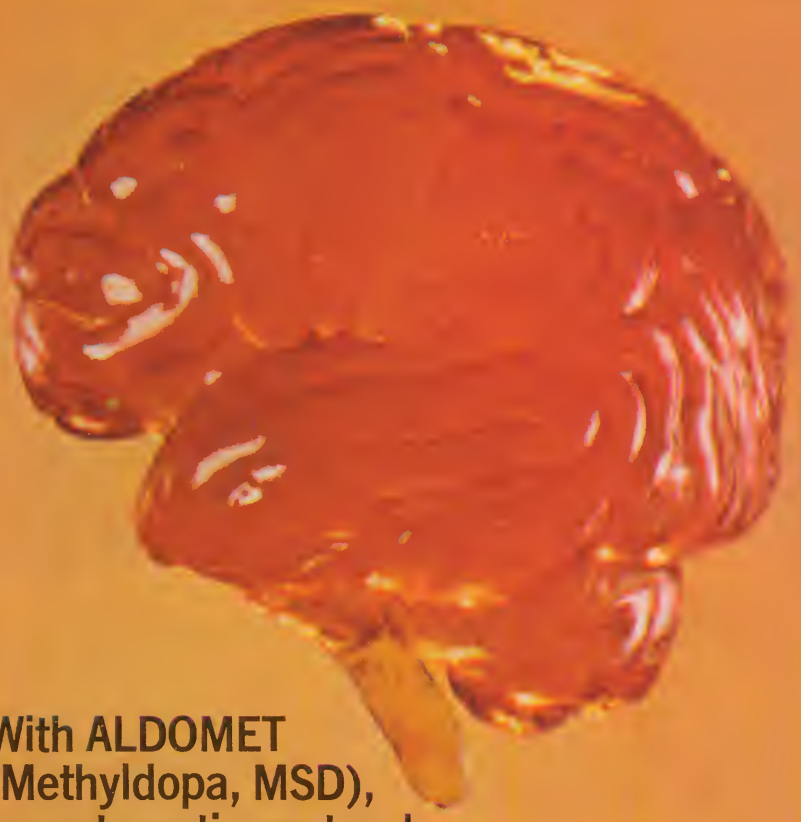


With ALDOMET (Methyldopa, MSD), existing renal function is usually unchanged

ALDOMET has no direct effect on renal function. When used in effective doses, ALDOMET usually does not reduce glomerular filtration rate, renal blood flow, or filtration fraction.

With ALDOMET (Methyldopa, MSD), cardiac output is generally unchanged

ALDOMET has no direct effect on cardiac function. When ALDOMET is used in effective doses cardiac output is usually maintained with no cardiac acceleration; in some patients the heart rate is slowed.



With ALDOMET (Methyldopa, MSD), symptomatic postural hypotension is infrequent

ALDOMET reduces both supine and standing blood pressure. Less frequent symptomatic postural hypotension is experienced with ALDOMET than with many other antihypertensive agents. Exercise hypotension and diurnal blood pressure variations rarely occur.

for hypertension

TABLETS, 250 mg, 500 mg, and 125 mg

ALDOMET®

(METHYLDOPA|MSD)

a unique antihypertensive agent

ALDOMET is contraindicated in active hepatic disease, hypersensitivity to the drug, and if previous methyldopa therapy has been associated with liver disorders. It is not recommended in pheochromocytoma.

It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. For more details see the brief summary of prescribing information.

MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

addendum

MSD
MERCK SHARP & DOHME

to further simplify therapy for many patients

now available

ALDOMET® 500 mg

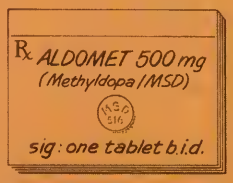
(METHYLDOPA|MSD)

- **often more practical to prescribe**
- **easier for patients to remember**

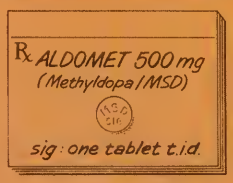
Now offered in addition to the standard 250-mg tablet, the new ALDOMET 500 mg tablet is a patient convenience. An especially important one, since in hypertension convenience of the dosage schedule is one factor that can make the difference in compliance of the patient. The minimum daily dose of ALDOMET is 250 mg b.i.d. The usual starting dose is 250 mg t.i.d. Dosage is adjusted as necessary by adding or deleting 250 mg or 500 mg at intervals of not less than two days. The maximum dose is 3.0 g per day.

Examples of b.i.d. or t.i.d. dosage convenience provided by ALDOMET 500 mg within the usual daily dosage range of 500 mg to 2.0 g:

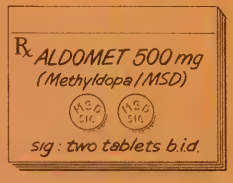
1.0-g daily dose =

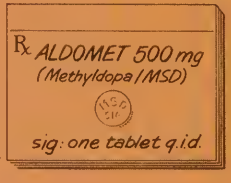


1.5-g daily dose =



2.0-g daily dose =





NOTE: Tablets shown are not actual size.

in hypertension

ALDOMET® (METHYLDOPA|MSD)

usually lowers blood pressure effectively



Contraindications: Active hepatic disease, such as acute hepatitis and active cirrhosis; if previous methyldopa therapy has been associated with liver disorders (see Warnings); hypersensitivity.

Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reaction or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings). May interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery. Methyldopa is not recommended for patients with pheochromocytoma. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by this procedure.

Adverse Reactions: *Central nervous system:* Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness, symptoms of cerebrovascular insufficiency, paresthesias, parkinsonism, Bell's palsy, involuntary choreoathetotic movements; psychic disturbances, including nightmares and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease daily dosage). Edema (and weight gain) usually relieved by use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, constipation, flatus, diarrhea, mild dryness of mouth, sore or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia. Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, skin rash.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensives other than thiazides. Tolerance may occur, usually between second and third month of therapy; increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. Syncope in older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower doses.

How Supplied: Tablets, containing 125 mg methyldopa each, in bottles of 100; Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 1000; Tablets, containing 500 mg methyldopa each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

Interprofessional Code

KENTUCKY MEDICAL ASSOCIATION

AND

KENTUCKY BAR ASSOCIATION

Revised June 11, 1975

PREAMBLE

General Principles

Doctors of medicine and attorneys at law, as members of two professions possessing a close personal relationship with those they serve, have established principles of ethics applicable to the traditions and requirements of their respective callings.

The physician has responsibility for the care of the individual, in health as in disease. He must minister to his patient's needs to the best of his ability and in accordance with the high precepts of the Hippocratic Oath.

The attorney is an officer of the court, sworn to support the Constitution of the United States and of the state or states in which he is admitted to practice. As is the physician, he also is pledged to maintain the confidence and to preserve inviolate the secrets of his clients. He will not reject, from any consideration personal to himself, the cause of the defenseless or oppressed, nor delay any man's cause for lucre or malice.

The attorney represents his client as advisor and confidant, as his advocate in legal proceedings and as negotiator in the business and personal affairs of his client. The physician's relationship is parallel, for he is also the advisor and confidant of his patient in matters of health.

Interprofessional Relations

Each profession is obligated by its own stature to respect and honor the calling of the other. Neither the fact nor the appearance of incompetence, corruption, dishonesty, or unethical conduct on the part of individual members of either profession can be tolerated. It follows then that each profession must vigorously support within its own ranks, as well as in the ranks of the other, those ethical concepts which each has found necessary in the public good. One who has chosen to be a physician or an attorney and has been found competent to be such by appropriate authorities, is vested with high responsibilities and privileges to enable him to serve the public with honor, with dignity, and with effectiveness.

This Code

A statement of ethical principles states a guide to the attainment of the best in interprofessional conduct and practices. IT IS NOT NECESSARILY OF A BINDING CHARACTER, NOR CAN IT BE SO DETAILED TO COVER EVERY CIRCUMSTANCE.

This Interprofessional Code constitutes the further recognition that with the great developments in the science and art of both medicine and law, it is inevitable that the physician and the attorney are drawn into steadily increasing association, as the law calls with increasing frequency upon medicine for its scientific knowledge and for its evaluation of facts so that the rights of individuals and of the government may be appropriately determined before various tribunals.

I. RECIPROCAL DUTIES

A. THE ATTENDING PHYSICIAN AND HIS PATIENT

The medical profession affirms the obligation of a patient's attending physician to cooperate willingly with the patient's attorney in supplying facts, primarily available only to him. The physician should accept the further responsibility of explaining such facts in such a manner that the attorney understands them and can determine their relationship to his client's cause. There should be complete cooperation between the physician and the attorney, each assuming his proper responsibility.

It is for the physician to determine the actuality or probability of fact pertaining to his patient's medical condition. It is for the attorney to determine how and under what circumstances such facts are to be appropriately presented.

A physician should never advise on the amount of damages a patient should seek to recover. The proper province of his professional advice is the extent, degree, or percentage of illness, injury, disability, or similar judgments based upon his professional knowledge of the case. He is not expected to understand technical rules of legal liability, or evidence, or of trial techniques. The latter are the exclusive province of the attorney.

B. THE ATTORNEY AND HIS CLIENT

It is a part of the attorney's oath on his admission to the bar of this state that he will not counsel or maintain any suit or proceeding which shall appear to him to be unjust, or any defense, except such as he believes to be honestly debatable under the law of the land. He will employ, for the purpose of maintaining the causes confided to him, such means only as are consistent with truth and honor and will never seek to mislead the judge or jury by any artifice or false statement of law or fact.

In discharge of that oath, it becomes the attorney's responsibility to marshal the facts and to obtain professional and other opinion which, in his judgment, are necessary for his client's case and in a manner consistent with his oath and the ethics of his profession.

It is important that the physician understand that legal proceedings in this country are conducted under what is known as the "adversary system." Under that system the attorney occupies a dual position. He is not alone an officer of the court. He is also the single-minded advocate for his client. He does not and cannot properly represent both sides to a dispute.

This system has developed in recognition of the truth demonstrated countless times that justice can usually be satisfactorily accomplished if the two or more contestants can present their points of view to some neutral third person who can weigh the opposing claims. Such claims are usually presented in the form of testimony which is offered in question and answer form. The judge of a court or the officer presiding before an administrative tribunal is the referee who weighs the opposing points of view and the conflicts in testimony. In a sense the judge or administrative officer much more nearly approximates the physician in objectivity. The physician well knows, however, that in some situations it is also possible for medical men to vary honestly and sincerely in their physical findings, their treatment, and their evaluation of illness or injury. In some types of court cases the parties prefer to let a group of sworn but interested citizens, the jury, weigh and "find" the facts.

II. MEDICAL EXAMINATIONS

(Requested by Attorneys or ordered by Court)

A. GENERAL

1. The law provides that a party to a lawsuit may be required to undergo a medical examination by agreement of the opposing attorneys or under a court order.

2. When an appointment is made for the medical examination of a person, the physician sets aside a part of his day for that purpose. It is, therefore, important that attorneys exert their best efforts to insure that such appointments are kept. The attorney for the party to be examined should give explicit instructions to such party that the physician must be notified in ample time should it become impossible for the party to keep the appointment.

B. SCOPE OF EXAMINATION

1. The physician may take a history and perform such examinations as may be advisable in

his judgment to formulate an informed opinion regarding the nature and extent of the party's medical condition.

2. Inquiries should not be made by the physician into matters not reasonably related to the legitimate scope of the medical examination.

3. The physician, following his examination, shall reduce to writing a medical report, following the outline set forth in Section III.B.5. herein. The original report shall be forwarded to the court or person requesting the examination, with copies as directed by the court or by the person requesting the examination.

III. WRITTEN MEDICAL REPORTS
(Prepared for Courts or Attorneys)

A. THE ATTORNEY

1. Requests for reports from a physician should be made in writing as soon as it is known that the information is needed. The request should be clear as to the specific information desired and the report should be prepared by the physician as promptly as possible.

2. If a report is requested on a physician's patient, the attorney must provide the physician with a written authorization from the patient.

B. THE PHYSICIAN

1. **Medical Records.** The physician must keep records adequate to supply a patient's attorney all pertinent information regarding the patient-client's medical history.

2. Requests for medical reports should be honored promptly. Undue delays in providing medical reports or bills bearing on a patient's legal rights may prejudice his case.

3. If a physician is unable to make a complete medical evaluation within the time required, he should notify the attorney. In this event, a preliminary report clearly designated as such may serve the attorneys needs until a complete evaluation can be rendered.

4. Patient's Authorization. The physician must have his patient's written authorization before releasing any report or test concerning the patient. Such authorization is not necessary when the person examined is not a patient of the physician, and the examination is made in connection with a legal claim.

5. **Content of Report.** The following, where applicable, should be included in the report:

a. Time, date and place of first visit.

b. Accurate history of the injury or medical condition, including pre-existing disease or prior injury.

c. Nature of examination and findings.

d. Results of laboratory work, x-rays, and consultations.

e. Opinion including, where possible, diagnosis and prognosis. **Upon request,** the opinion should also evaluate future physical impairment, necessity for future treatment or surgery, the effect of aggravation of any pre-existing disease or prior injury, and length of convalescence. The opinion should likewise include the physician's true opinion on the cause of the patient's condition, and the strength of his opinion in evaluating the cause. In this regard, he should consider and state all objective and subjective matters bearing on this opinion, including, where appropriate, his evaluation of the patient's candor when considered in the light of his own medical knowledge.

f. State if patient's condition is stationary, or if the patient is discharged.

g. Subsequent examination: Include complaints and evaluation of condition, nature of treatment, confinement to hospital or home, referrals to other physicians, patient's progress, results of x-rays, ECGs, EEGs, laboratory work and consultations, and a concluding diagnosis and prognosis (see Item e. above).

h. Enclose separately an itemized statement of medical expense to date. Omit charges for medical reports or attorney consultations or ANY REFERENCE TO INSURANCE.

i. Include estimate of cost of future medical care.

IV. CONFERENCES

The physician and the attorney should confer relative to the common problems presented in a particular case. Such conferences should be arranged well in advance of court or other hearing at the mutual convenience of each, in full appreciation that to each profession, time is of the utmost importance. No physician and no attorney should be required to spend unnecessary time in arranging or attending such a conference. The attorney who knows and understands the progress of his client's case, the conflict, if any, of its medical aspects, and the probability of settlement or trial should determine the necessity of a conference.

It is unfair to the patient-client, the physician, and the cause of justice to present a medical witness who has not first conferred with the attorney and who, therefore, may lack a full appreciation of the significance to the case of the particular evidence he is being asked to give. It is equally obvious that the attorney is less able to represent the full interest of his client where he has not had the advantage of full conferences with the physician in advance of presenting the case.

V. DEPOSITIONS AND/OR COURT APPEARANCE

Our system of justice depends on being able to require any citizen's time at a judicial proceeding and to give testimony regarding the case. A conference should be held between the physician and the attorney proposing to call him as a witness at some time mutually convenient before the physician is to testify.

A. COURT TESTIMONY

Both parties recognize that when it has been determined that the just and proper effect of a physician's testimony cannot be obtained without an oral examination in court, there is a necessity for the dissemination of information to both professions concerning the time problems involved in court testimony. The Medical Association recognizes that the legal profession faces calendar problems, which include the uncertainty of dates in a fluid trial calendar. The Bar Association likewise recognizes that the physician's appointments are made in advance and that physicians are in addition faced with pressing medical problems which sometimes cannot be deferred.

1. **Attorney's Duties:**

a. The attorney should ascertain whether the physician will be available for a trial term prior to the date assigned for trial at that term. He should not order the attendance of a physician as witness unless necessary and in any case without prior notice and conference concerning the matters as to which he is to be interrogated unless both the attorney and the physician agree that such conference is unnecessary.

b. The attorney should write to the physician immediately following the docket call to advise the physician of the proposed trial date.

c. The attorney should keep the physician's office advised of the status of the docket and notify the physician as soon as possible prior to trial of the probable trial date.

d. In the event of settlement or postponement, the physician should be immediately notified of that fact.

e. The attorney should give the physician as much notice as possible of the time when his attendance in court is desired. Physicians should not be asked to appear until the attorney is reasonably certain that they will not have to remain at the courthouse more than a short period of time before being allowed to testify. When the physician enters the court room, he shall, through a court attendant, make his presence known to the attorney trying the case. The attorney shall endeavor to put the physician on the stand as soon as possible after his arrival in the court room subject to orderly and proper presentation of the case.

2. **Physician's Duties:**

a. The physician has a moral and ethical obligation to give testimony regarding his patient. If the physician undertakes the care of a patient and litigation ensues, the physician should recognize his responsibility to testify as to the medical condition of that patient, subject to the provisions of this Agreement.

b. When given adequate notice of the time when he will be called upon to testify, the physician should make himself available at that time, unless an emergency situation arises which precludes his appearance.

B. DEPOSITIONS

1. **Physician-Patient Privilege.** Where testimony is given and documents are called for by counsel during the taking of depositions in personal injury lawsuits, the usual obligation of confidence in the physician-patient relationship does not exist, and physicians shall furnish any and all pertinent documents, reports, records, notes or x-rays regarding the patient which are requested by counsel for either party to the lawsuit.

2. **Deposition Defined.** A deposition is an official proceeding authorized by law whereby a physician may be required to give testimony and be cross-examined under oath outside of court before a court reporter who is a notary public and in the presence of attorneys representing the parties. He may be requested to produce pertinent medical records at the deposition hearing. He may also be requested to release the records, x-rays, ECGs, EEGs, etc. to the notary public for duplication and return.

3. **Time and Place.** The time and place of the deposition should be set **by agreement** with

the physician. Unless there is a compelling reason to the contrary, it should be taken at the physician's office **at the time agreed, keeping in mind that an attorney's time has the same value as a physician's.**

4. **Subpoenas—Medical Records.** Production of pertinent medical records may also be required by subpoena duces tecum served on the physician. That subpoena requires the physician to attend the deposition at the time and place stated in the subpoena, and there to produce the specified records.

5. **If Attendance at Deposition A Hardship.** If the time and place described in the subpoena for the deposition creates a hardship, the physician should immediately bring this fact to the attention of counsel taking the deposition.

6. **Preparation and Deportment**

a. The Physician. Since the testimony given at deposition hearings may be read at the trial, it is important that the physician prior to deposition prepare himself as for trial and that his attitude and deportment at the deposition hearing be similar to that at trial.

b. The Attorney. An attorney should totally prepare his case from the medical-legal standpoint so that with a careful use of words he can reduce the area of misunderstanding. It is not proper for an attorney to seek to color the professional opinion of the physician. No attorney is justified in abusing, badgering or browbeating any witness, including a physician.

7. **Familiarity with Records.** The physician and the attorney should be thoroughly familiar with their own records and with other related records, including hospital charts and records, at the time the deposition is taken and should have as many of the records at the time the deposition is taken as is possible so that they may be referred to as needed.

8. **Predeposition Conference.** It is to be understood that it is proper to have a predeposition conference between the attorney for the patient and the physician to facilitate the taking of the deposition.

NOTE: If court testimony or a deposition of a physician cannot be set by agreement, the physician's attendance can be required by appropriate legal process. If any doubt arises as to the effect of such legal process, the physician should consult his attorney. A physician should not take offense at being served with a subpoena in the event an agreement cannot be made.

VI. COMPENSATION FOR MEDICAL REPORTS, DEPOSITIONS AND COURT APPEARANCES

It is impractical to establish precise rules governing a physician's fees for medical reports, depositions and court appearances. It is important, however, that fees be reasonable and it is suggested that they be discussed in advance by the physician and the attorney. In this way, the major cause of misunderstanding and dissatisfaction will be eliminated. **Under no circumstances may a physician charge a fee for an examination or for testifying which is contingent upon the outcome of the lawsuit.**

As a matter of policy an attorney should not request a physician to testify on deposition or in court, nor should he subpoena him, without making arrangements for reasonable compensation. This is not required by law, but is suggested as a matter of fairness and cooperation between the professions. A physician should be compensated for the time spent away from his professional practice, regardless of whether he is used as a witness.

VII. COMPENSATION FOR MEDICAL TREATMENT TO THE PATIENT

A. The patient, not his attorney, is responsible for paying all bills incurred by the patient for his medical care. While bills should be sent to the attorney on the attorney's request, this does not make the attorney responsible for their payment.

B. When the attorney first obtains a written authorization from his client for the release of medical information, the attorney should request his client to authorize the attorney to take out of the proceeds of any recovery by way of settlement or verdict the funds necessary to pay the physician's then outstanding bill for medical treatment. Upon such authorization being given, the attorney should so inform the physician. Upon recovery, if any, the attorney should, in every case, seek to protect the interest of the physician and see that the physician's bill is paid. In the event there is no recovery,

or the recovery is insufficient to pay the bill, the attorney should so inform the physician.

(For suggested form, see Appendix A)

VIII. IMPLEMENTATION OF THE CODE

The purpose of this Code is to establish, maintain and perpetuate a greater degree of understanding and ethics between the respective medical and legal professions. Any abuse of this Code or violations thereof by a member of either profession should be brought to the attention of the Physician-Attorney Liaison Committee for a determination to be made as expeditiously as possible.

Notice of the nature and pendency of the complaint shall be given to the person about whom the complaint is made.

IX. AMENDMENTS

This Code may be amended from time to time upon joint resolution of the respective associations represented herein.

The foregoing Code having been submitted to the Board of Governors of the Kentucky State Bar Association and the Board of Trustees of the Kentucky Medical Association and approved by both of them, NOW THEREFORE we, the chief executive officers of said associations IN WITNESS WHEREOF have hereunto subscribed the names of our respective associations pursuant to authority vested in us as of this the 18th day of April, 1973.

KENTUCKY STATE BAR ASSOCIATION
William E. Rummage, President
KENTUCKY MEDICAL ASSOCIATION
Lee C. Hess, M.D., President

This code is implemented by a joint committee of the Kentucky Bar Association and the Kentucky Medical Association. The current membership of the Physician-Attorney Liaison Committee is: Thomas M. Marshall, M.D., Louisville, Co-Chairman; Mr. John J. O'Hara, Attorney at Law, Covington, Co-Chairman; Mr. John T. Ballantine, Attorney at Law, Louisville; Lee C. Hess, M.D., Florence; Gordon L. Hyde, M.D., Lexington; and Mr. Joe C. Savage, Attorney at Law, Lexington.

APPENDIX A

AGREEMENT TO PAY PHYSICIAN FEES

I, _____, hereby authorize and direct my attorney, _____, to pay promptly to _____, M.D., from my portion of the proceeds of any recovery which may be paid to me through my attorney as a result of the injuries sustained by me (and _____), on _____, 19____, the unpaid balance of any reasonable charges for professional services rendered by said physician and his associates on my behalf, said professional services to include those for treatment heretofore or hereafter rendered to the time of the settlement or recovery, as well as those for medical reports, consultations, depositions and court appearances on my behalf. I understand that this does not relieve me of my personal responsibility for all such charges in the event there is no recovery or if the recovery is insufficient to satisfy such charges.

DATED: _____ _____

Patient

APPROVED AND ACCEPTED:

DATED: _____ _____

Attorney

The Land of the Free didn't come cheap.



Even before we had a formal constitution, investors were asked to buy over $27,000,000 in securities to provide the arms we needed. And to provide the money to rebuild.

That was just the beginning. Through war and peace, the good years and the bad, Americans have always given freely. Millions invested their money. Many invested their lives.

We've never stopped fighting for freedom. For the American way of life.

Today, over 9½ million Americans buy U.S. Savings Bonds through the Payroll Savings Plan.

Maybe you should consider your interest and take stock in America. It isn't cheap, but there's never been a better deal.

Now E Bonds pay 6% interest when held to maturity of 5 years (4½% the first year). Lost, stolen or destroyed Bonds can be replaced if records are provided. When needed, Bonds can be cashed at your bank. Interest is not subject to state or local income taxes, and federal tax may be deferred until redemption.



Take stock in America.

200 years at the same location.

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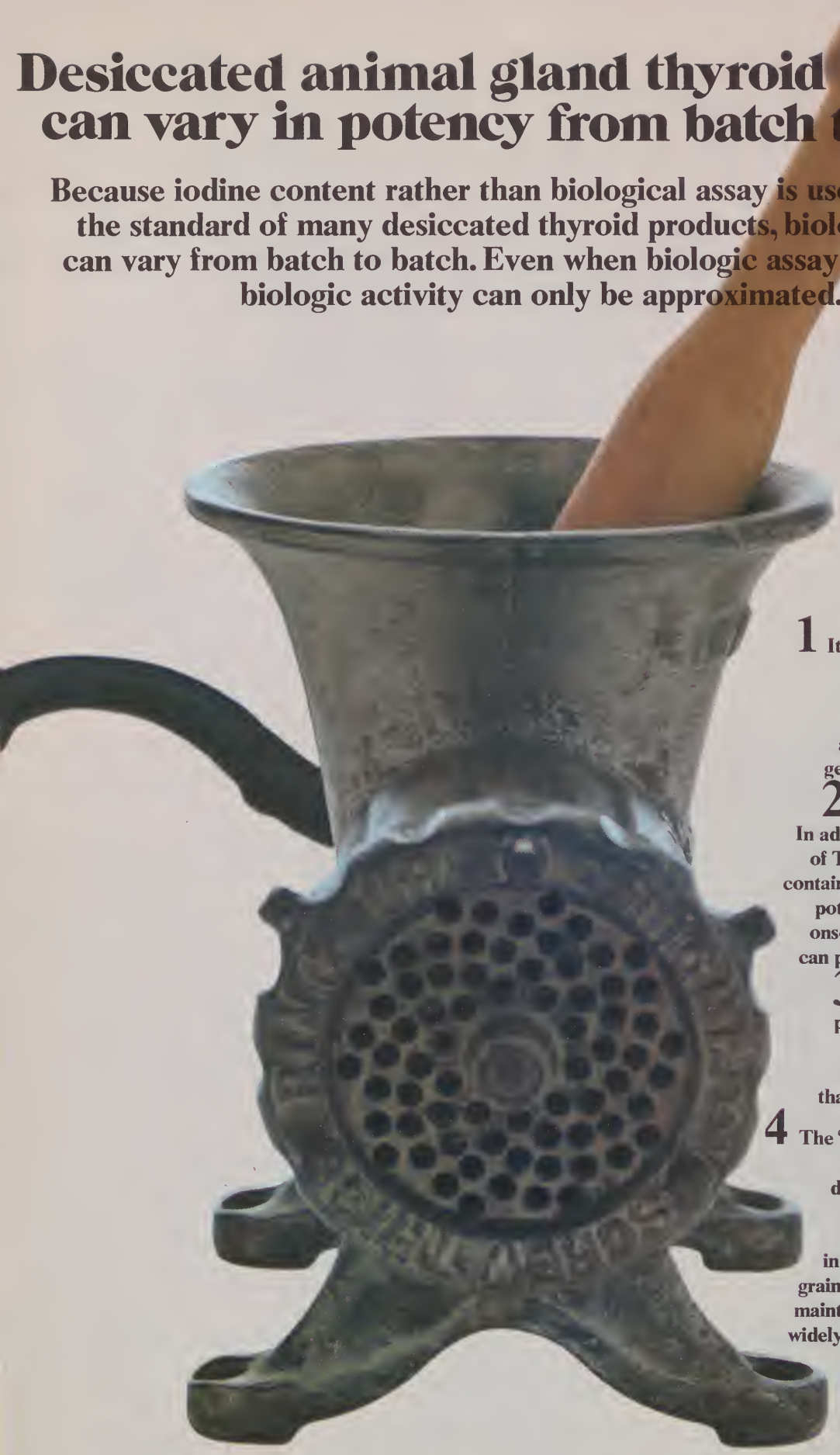
Synthroid®
(sodium levothyroxine, U.S.P.) FLINT
or
desiccated thyroid



consider the differences...

Desiccated animal gland thyroid products can vary in potency from batch to batch.

Because iodine content rather than biological assay is used to measure the standard of many desiccated thyroid products, biologic activity can vary from batch to batch. Even when biologic assay is employed, biologic activity can only be approximated.



1 It is recognized that T_4 and T_3 content in desiccated thyroid and thyroglobulin varies from animal to animal, by animal species, geography, and animal diet.

2 Of therapeutic concern: In addition to varying amounts of T_4, desiccated thyroid may contain varying amounts of T_3, a potent compound with rapid onset and fleeting action that can produce metabolic surges.

3 Even when kept under proper storage conditions, desiccated thyroid deteriorates more rapidly than the synthetic hormone.

4 The "usual maintenance dose" for the widely prescribed desiccated thyroid is "from 1 grain to 3 grains per day, but it may vary, in individual patients from 1/2 grain to 10 grains."[1] The "usual maintenance dose" of the most widely prescribed thyroglobulin (which is also a desiccated thyroid product) is "0.5 to 3.0 grains daily."[2]

1. Armour Thyroid (Tablets). 1975 Physicians' Desk Reference. p. 561.
2. Proloid® (thyroglobulin). 1975 Physicians' Desk Reference. p. 1575.

Every batch of Synthroid® T_4 is of controlled potency. (sodium levothyroxine, U.S.P.) FLINT



SYNTHROID is T_4. It provides your patients with everything they need for complete thyroid replacement therapy.

1 Sodium levothyroxine is *not derived* from any animal gland source. It is a synthetic and, since sodium levothyroxine is the only active ingredient, its weight is the sole determinate of potency.

2 SYNTHROID (sodium levothyroxine) is T_4 which is converted by the patient to T_3 at the cellular level, thereby providing a physiologic source and amount of T_3 to meet metabolic needs for complete thyroid replacement therapy. Because the onset of effect is slower and more steady, the possibility of sudden metabolic surges is reduced with SYNTHROID therapy.

3 SYNTHROID (sodium levothyroxine) products have a longer and more reliable shelf life than Thyroid U.S.P. when kept under the same proper storage conditions. There is no animal protein present in SYNTHROID products.

4 A recent study of 44 patients with hypothyroidism indicates that 89 percent of the patients were maintained with doses of L-thyroxine (SYNTHROID) between 100 mcg. and 200 mcg. (0.1 mg. and 0.2 mg.) per day.[3]

3. Stock, J.M., Surks, M.I., and Oppenheimer, J.H.: Replacement dosage of L-thyroxine in hypothyroidism. A re-evaluation. New Engl. J. Med. *290*:529-33, 1974.

Eliminates many of the uncertainties of desiccated thyroid therapy.

Synthroid®

(sodium levothyroxine, U.S.P.) FLINT

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC.
Deerfield, Illinois 60015

See reverse side for full prescribing information.

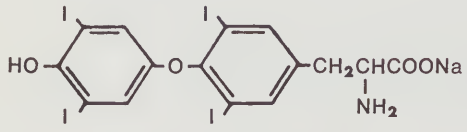
Synthroid®
(sodium levothyroxine, U.S.P.*) FLINT

Synthroid Tablets—for oral administration
Synthroid for Injection—for parenteral administration



Description

SYNTHROID (sodium levothyroxine) **Tablets** and SYNTHROID **Injection** contain synthetic crystalline sodium levothyroxine (L-thyroxine). L-thyroxine is the principal hormone secreted by the normal thyroid gland.



Sodium Levothyroxine

Actions

SYNTHROID (sodium levothyroxine) **Tablets,** taken orally, provide hormone that is readily absorbed from the gastrointestinal tract. SYNTHROID **Injection** is effective by any parenteral route. Following absorption, the synthetic L-thyroxine provided by SYNTHROID products cannot be distinguished from L-thyroxine that is endogenously secreted. Each is bound to the same serum proteins and each exhibits a six to seven day circulating half-life in the euthyroid individual.

Both SYNTHROID products will provide L-thyroxine as a substrate for physiologic deiodination to L-triiodothyronine. Therefore, patients taking SYNTHROID products will demonstrate normal blood levels of L-triiodothyronine even when the thyroid gland has been surgically removed or destroyed by radioiodine. Administration of levothyroxine alone will result in complete physiologic thyroid replacement.

Indications

SYNTHROID (sodium levothyroxine) products serve as specific replacement therapy for reduced or absent thyroid function of any etiology. SYNTHROID **Injection** can be used intravenously whenever a rapid onset of effect is critical, and either intravenously or intramuscularly in hypothyroid patients whenever the oral route is precluded for long periods of time.

Contraindications

There are no absolute contraindications to SYNTHROID (sodium levothyroxine) therapy. Relative contraindications include acute myocardial infarction, uncorrected adrenal insufficiency and thyrotoxicosis. (See WARNINGS)

Warnings

Patients with cardiovascular diseases warrant particularly close attention during the restoration of normal thyroid function by any thyroid drug. In such cases, low initial dosage increased slowly by small increments is indicated. Occasionally, the cardiovascular capacity of the patient is so compromised that the metabolic demands of the normal thyroid state cannot be met. Clinical judgment will then dictate either a less-than-complete restoration of thyroid status or reduction in thyroid dosage.

Endocrine disorders such as diabetes mellitus, adrenal insufficiency (Addison's disease), hypopituitarism and diabetes insipidus are characterized by signs and symptoms which may be diminished in severity or obscured by hypothyroidism. SYNTHROID (sodium levothyroxine) therapy for such patients may aggravate the intensity of previously obscured symptoms and require appropriate adjustment of therapeutic measures directed at these concomitant disorders.

Thyroid replacement may potentiate the effects of anticoagulants. Patients on anticoagulant therapy should have frequent prothrombin determinations when instituting thyroid replacement to gauge the need to reduce anticoagulant dosage.

Precautions

Overdosage with any thyroid drug may produce the signs and symptoms of thyrotoxicosis, but resistance to such factitious thyrotoxicosis is the general rule. With SYNTHROID (sodium levothyroxine) **Tablets,** the relatively slow onset of action minimizes the risk of overdose but close observation in the weeks following institution of a dosage regimen is advised. Treatment of thyroid hyperactivity induced by oral medication is confined to interruption of therapy for a week, followed by reinstitution of daily therapy at an appropriately reduced dosage.

Adverse reactions

Adverse reactions are due to overdose and are those of induced hyperthyroidism.

Dosage and administration

For most adults, a final dosage of 100 mcg (0.1 mg) to 200 mcg (0.2 mg) of SYNTHROID (sodium levothyroxine) **Tablets** daily will restore normal thyroid function and only occasionally will patients require larger doses. Failure to respond adequately to a daily oral intake of 400 mcg (0.4 mg) or more is rare and should prompt reconsideration of the diagnosis of hypothyroidism, special investigation of the patient in terms of malabsorption of L-thyroxine from the gastrointestinal tract or poor adherence to therapy.

The concomitant appearance of other diseases, especially cardiovascular diseases, usually dictates a replacement regimen with initial doses smaller than 100 mcg/day (0.1 mg).

In otherwise healthy adults with relatively recent onset of hypothyroidism, full replacement dose of 150 mcg (0.15 mg) or 200 mcg (0.2 mg) has been instituted immediately without untoward effect and with good therapeutic response. General experience, however, favors a more cautious approach in view of the possible presence of subclinical disorders of the cardiovascular system or endocrinopathies.

The age and general physical condition of the patient as well as the severity and duration of hypothyroid symptoms determine the starting dosage and the rate of incremental dosage increase leading to a final maintenance dosage. In the elderly patient with long standing disease, evidence of myxedematous infiltration and symptomatic, functional or electrocardiographic evidence of cardiovascular dysfunction, the starting dose may be as little as 25 mcg (0.025 mg) per day. Further incremental increases of 25 mcg (0.025 mg) per day may be instituted at three to four week intervals depending on patient response. Conversely, otherwise healthy adults may be started at higher daily dosage and raised to the full replacement dosage in two to three weeks. Clearly it is the physician's judgment of the severity of the disease and close observation of patient response which determines the rate of dosage titration.

Laboratory tests to monitor thyroid replacement therapy are of limited value. Although measurement of normal blood levels of thyroxine in patients on replacement regimens frequently coincides with the clinical impression of normal thyroid status, higher than normal levels on oral replacement of levothyroxine occasionally occurs and should not be considered evidence of overdosage per se.

In all cases, clinical impression of the well-being of the patient takes precedence over laboratory determination in determining the appropriate individual dosage.

In infants and children, there is a great urgency to achieve full thyroid replacement because of the critical importance of thyroid hormone in sustaining growth and maturation. Despite the smaller body size, the dosage needed to sustain a full rate of growth, development and general thriving is higher in the child than in the adult, as much as 300 mcg (0.3 mg) to 400 mcg (0.4 mg) per day.

In myxedema coma or stupor, without concomitant severe heart disease, 200 to 500 mcg of SYNTHROID **Injection** may be administered intravenously as a solution containing 100 mcg/ml. Although the patient may show evidence of increased responsivity within six to eight hours, full therapeutic effect may not be evident until the following day. An additional 100 to 300 mcg or more may be given on the second day if evidence of significant and progressive improvement has not occurred. Like the oral dosage form, SYNTHROID **Injection** produces a predictable increase in the circulating level of hormone with a long half-time. This usually precludes the need for multiple injections but continued daily administration of lesser amounts intravenously should be maintained until the patient is fully capable of accepting a daily oral dose.

In the presence of concomitant heart disease, the sudden administration of such large doses of L-thyroxine intravenously is clearly not without its cardiovascular risks. Under such circumstances, intravenous therapy should not be undertaken without weighing the alternative risks of the myxedema coma and the cardiovascular disease. Clinical judgment in this situation may dictate smaller intravenous doses of levothyroxine.

SYNTHROID **Injection** by intravenous or intramuscular routes can be substituted for the oral dosage form when ingestion of SYNTHROID **Tablets** is precluded for long periods of time.

How supplied

SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in 6 concentrations: 25 mcg (0.025 mg)—orange . . . 50 mcg (0.05 mg)—white . . . 100 mcg (0.1 mg)—yellow . . . 150 mcg (0.15 mg)—violet . . . 200 mcg (0.2 mg)—pink . . . 300 mcg (0.3 mg)—green. Depending on strength, these tablets are available in bottles of 100, 500, 1000 and 5000.

SYNTHROID (sodium levothyroxine) for **Injection** is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, U.S.P. A separate 5 ml vial containing Sodium Chloride Injection, U.S.P. is provided as a diluent.

Directions for reconstitution

Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml of the Sodium Chloride Injection, U.S.P. to the vial. Shake vial to insure complete mixing. **Use immediately** after reconstitution. Discard any unused portion.

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Deerfield, Illinois 60015

*U.S. Pat. 2,889,363

"Kid, this stuff is the bananas."



Experts agree: when it comes to good-tasting banana flavor—without the unpleasant taste of paregoric—the makers of Donnagel®-PG really know their stuff!

For diarrhea

Donnagel®-PG Ⓥ

Donnagel with paregoric equivalent

Each 30 cc. contains:	
Kaolin	6.0 g.
Pectin	142.8 mg.
Hyoscyamine sulfate	0.1037 mg.
Atropine sulfate	0.0194 mg.
Hyoscine hydrobromide	0.0065 mg.
Powdered opium, USP (equivalent to paregoric 6 ml.) (warning: may be habit forming)	24.0 mg.
Sodium benzoate (preservative)	60.0 mg.
Alcohol, 5%	

Now with child-proof closure

A·H·ROBINS

A. H. Robins Company
Richmond, Virginia 23220

IN COUGHS OF COLDS, 'FLU, AND U.R.I.: CLEAR THE TRACT WITH THE ROBITUSSIN® LINE



THE **5 RELIABLE ROBITUSSINS** can really help clear the respiratory tract. All contain guaifenesin,* the expectorant that works systemically to help stimulate the output of lower respiratory tract fluid. This enhanced flow of less viscid secretions promotes ciliary action and makes thick, inspissated mucus less viscid and easier to raise.

*formerly named Glyceryl Guaiacolate

For productive and unproductive coughs

ROBITUSSIN®

Each 5 ml teaspoonful contains:
Guaifenesin, NF..... 100 mg
Alcohol, 3.5%

For severe coughs

ROBITUSSIN A-C® Ⓥ

Each 5 ml teaspoonful contains:
Guaifenesin, NF..... 100 mg
Codeine Phosphate, USP..... 10.0 mg
(warning: may be habit forming)
Alcohol, 3.5%

Non narcotic for 6-8-hr. cough control

ROBITUSSIN-DM®

Each 5 ml teaspoonful contains:
Guaifenesin, NF..... 100 mg
Dextromethorphan Hydrobromide, NF..... 15 mg
Alcohol, 1.4%

Decongests nasal passages and sinus openings as it helps relieve coughs

ROBITUSSIN-PE®

Each 5 ml teaspoonful contains:
Guaifenesin, NF..... 100 mg
Pseudoephedrine** Hydrochloride, NF..... 30 mg
Alcohol, 1.4%
**Formerly contained Phenylephrine Hydrochloride 10 mg

Decongestant action helps control cough and clear stuffy nose and sinuses. Non narcotic.

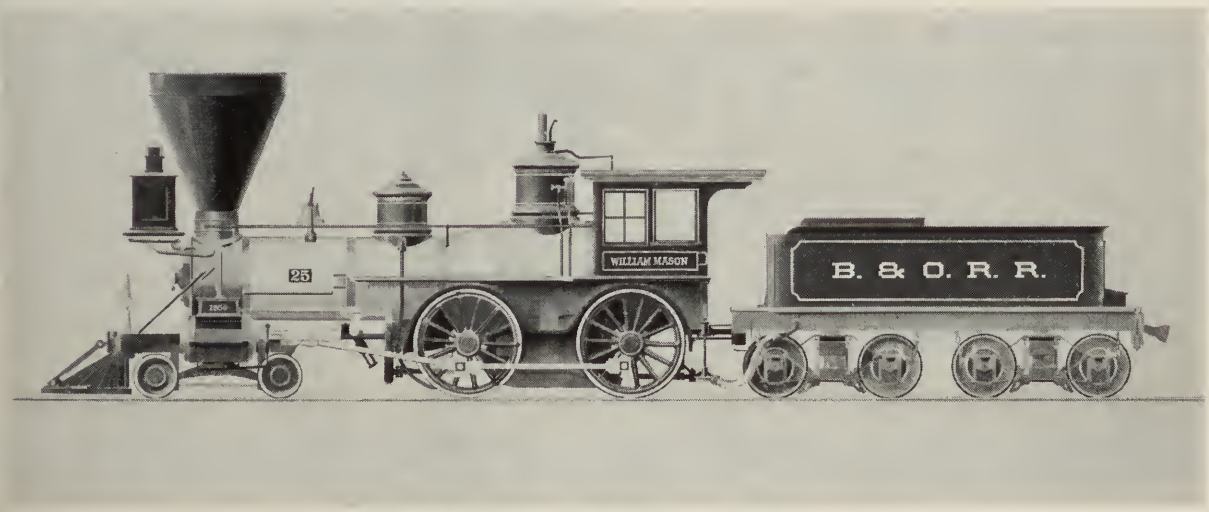
ROBITUSSIN-CF®

Each 5 ml teaspoonful contains:
Guaifenesin, NF..... 50 mg
Phenylpropanolamine Hydrochloride, NF..... 12.5 mg
Dextromethorphan Hydrobromide, NF..... 10 mg
Alcohol, 1.4%

All Robitussin formulations available on your Rx or Recommendation.

A. H. Robins Company, Richmond, Va. 23220 A·H·ROBINS

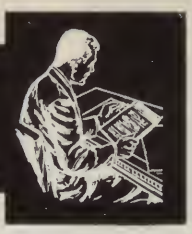
For many years Robins has spotlighted the expectorant action of the Robitussin cough formulations by featuring action photographs of steam engines. In keeping with this tradition, the company recently commissioned a well-known illustrator to render full-color drawings of several classic locomotives... accurate to the minutest detail. The first of the series is now available. To order your print suitable for framing, write "Robitussin Clear-Tract Engine #1" on your Rx pad and mail to "Vintage Locomotives," Dept. T4, A. H. Robins Company, 1407 Cummings Drive, Richmond, Va. 23220.



The William Mason (1856)



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

Case 8-73—This 26-year-old divorced, white female, Gravida ?, Para ?, was seen by her family physician at his office on May 19, 1973, with the complaint of amenorrhea; she was "one week late". As was his practice, he administered 1 cc estrogen intramuscularly. Within 30 seconds after receiving the injection, she fainted. She was carried to a treatment room and the life squad was called. She received 1 cc adrenalin.

At the hospital emergency room at 10:45 a.m. she was cyanotic, no heart sounds were heard. There was no respiration or blood pressure obtainable. An airway was inserted and cardiac pulmonary resuscitation was attempted until 11:12 a.m. She received Caffeine Sodium Benzoate at 10:55 a.m., 1 cc adrenalin at 11 a.m., and an IV was started of 5% glucose/water; 4 cc Levophed was injected in the IV at 11 a.m.; oxygen by compressor bag was administered. She was pronounced dead at 11:12 a.m.

An autopsy revealed:

(1) Aspiration of gastric contents

(2) Intrauterine pregnancy—early

The pathologist's comments were: "The history of a possible 'anaphylactoid' reaction can be pursued by review of the clinical situation. The findings of the gastric contents within the trachea and bronchial tree were considered enough to account for death and are a recognized complication of unconsciousness which could occur for many reasons not necessarily anaphylaxis."

Comments

The Committee on Maternal Mortality classified this as an indirect obstetrical death with possible preventable factors. It is felt at the present time that there is no justification for steroid administration during pregnancy or when pregnancy is suspected. This case is published to emphasize the danger of intramuscular injections, particularly when an adequate history is not obtained concerning possible allergies to certain medications. Of course a definite diagnosis is not established here. It is possible that she fainted following an intramuscular injection, for some people will do this. However, it is most unusual for them to aspirate gastric content. This is a possibility. Perhaps more vigorous attempts at resuscitation in the office would have prevented this death.

ORGANIZATION SECTION

National Easter Seal Meeting To Be Held in Louisville

The 1975 Annual Convention of the National Easter Seal Society for Crippled Children and Adults will be held in Louisville at the Galt House from November 4 to 8.

David B. Clark, M.D., Professor and Chairman of the Department of Neurology, University of Kentucky, will address a one-day conference on "Early Intervention" on Friday, November 7.

This special program session for physicians, physical and occupational therapists, early childhood educators and parents will deal with infant stimulation, neonatal research and implications for early intervention programs.

Other participants for this November 7 session will be William Oh, M.D., Professor of Pediatrics and Obstetrics, Brown University, Providence, R.I., and Kathryn E. Barnard, R.N., Ph.D., principal investigator for the Premature Infant Refocus Project at the Child Development and Mental Retardation Center, University of Washington, Seattle.

Rheumatoid Arthritis Symposium Set for November 20

"The Allied Health Professional's Role in the Management of Rheumatoid Arthritis" will be the topic of a symposium, sponsored by the Arthritis Management Program and the Kentucky Chapter of the Arthritis Foundation. Held November 20 at Breckinridge Inn in Louisville, the program is designed for the registered and practical nurse, occupational and physical therapist, social worker and the physician and his staff.

David H. Neustadt, M.D., Director of the Arthritis Management Program, states that the symposium will emphasize the practical application of comprehensive multi-discipline care of the rheumatoid arthritis through the "team approach."

Featured on the program will be Graham Lister, M.D., Professor of Surgery, University of Louisville, and Joseph E. Levinson, M.D., Professor of Medicine and Director, Special Treatment Center for juvenile arthritis, Cincinnati.

Annual Meeting To Be Featured In November Journal

The 125th Annual Meeting of the Kentucky Medical Association was being held in Louisville as this issue of *The Journal* went to press.

Full news of the convention will be featured in the November issue. Information on the new officers and trustees as well as attendance figures will be highlighted next month.

In Memoriam

HENRY H. MOODY, M.D.
Cynthiana
1904-1975

Henry Hatcher Moody, M.D., died on August 15, at the age of 71. A 1929 graduate of the University of Louisville School of Medicine, Doctor Moody practiced general surgery in Cynthiana. He belonged to the Harrison County Medical Society, as well as the Kentucky Medical Association.

NEWS ITEMS

Virginia T. Keeney, M.D., Associate Professor of the Department of Family Practices, University of Louisville, has been appointed Medical Director of the Office of Continuing Education. Doctor Keeney will devote half of her time to the new position and the other half to the Department of Family Practices.

KMA Annual Meeting Has High Attendance—*Details in November Journal*



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LOUISVILLE Southern Optical Bldg. — 640 River City Mall
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Medical Towers Bldg., Floyd & Gray
Doctors Office Bldg., Liberty at Floyd
Medical Arts Bldg., 1169 Eastern Parkway
Professional Bldg. East, 3101 Breckinridge Lane
Medix Bldg. — Adj. S.S. Mary & Elizabeth Hosp.
ST. MATTHEWS 313 Wallace Center and 108 McArthur Drive
NEW ALBANY Professional Arts Bldg., 1919 State Street
BOWLING GREEN 524 East Main Street
OWENSBORO Doctors Bldg., 1001 Center Street

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Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed: "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."*

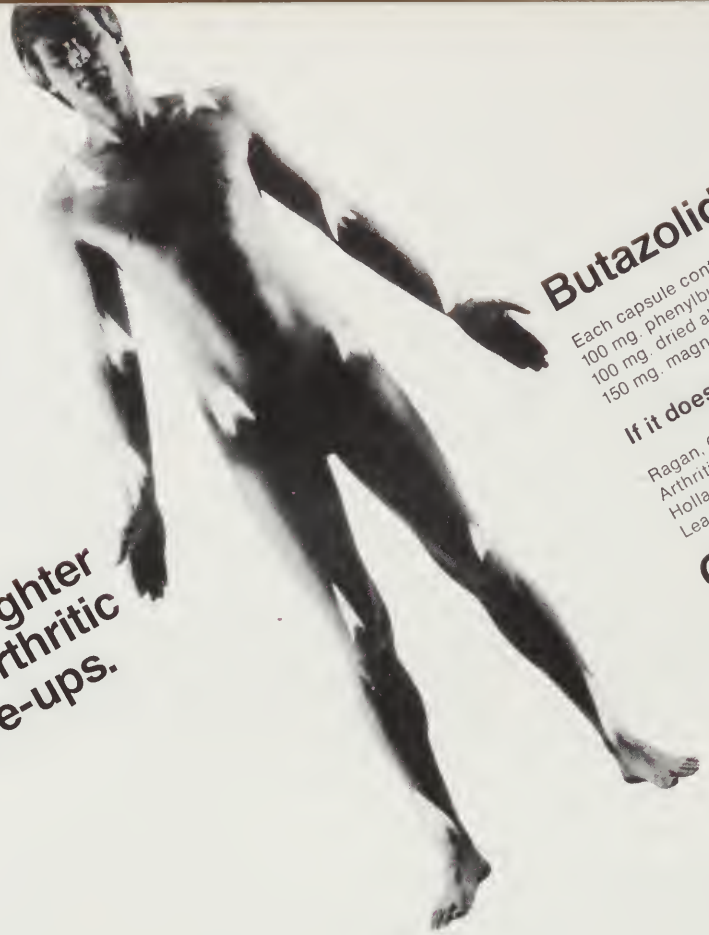
If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you can get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.



Fire fighter for arthritic flare-ups.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

Ragan, C.: The Clinical Picture of Rheumatoid Arthritis, in Arthritis, ed. 8, edited by J. L. Hollander and D. J. McCarty, Jr., Philadelphia, Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.
Indications: Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.
Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.
Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.
Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.
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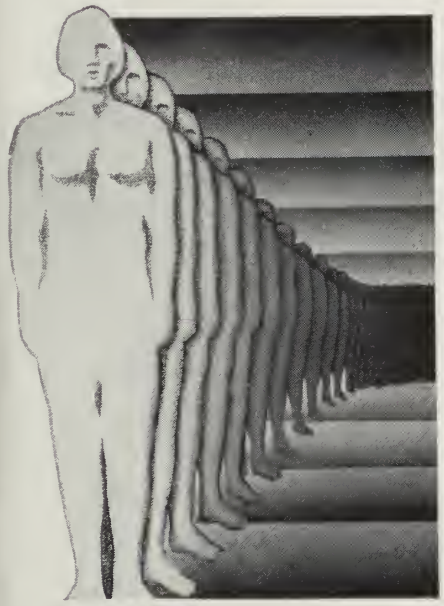
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 to 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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5 mg, 10 mg, 25 mg capsules

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WHILE YOU ELIMINATE THE PATHOGENS.

FOR THE PAIN

☐ **Early relief of painful symptoms** such as burning and pain associated with urgency and frequency.

FOR THE PATHOGENS

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Appropriate antibacterial therapy: Up to 3 days therapy with Azo Gantrisin 4 to 6 tablets *Stat.*, then 2 tablets *q.i.d.*; then 11 days with Gantrisin (sulfisoxazole) may be considered.

AZO GANTRISIN®

(50 mg phenazopyridine HCl and 0.5 Gm sulfisoxazole)

Before prescribing, please consult complete product information, a summary of which follows.

Indications: In adults, urinary tract infections complicated by pain (primarily cystitis, pyelitis and pyelonephritis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. *Important Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents including the sulfonamides. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established. Teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infections is 4 to 6 tablets initially, then 2 tablets four times daily for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment of the infection with Gantrisin (sulfisoxazole) may be considered.

Note: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after ingestion.

How Supplied: Tablets, each containing 0.5 Gm sulfisoxazole and 50 mg phenazopyridine HCl —bottles of 100 and 500.

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MEDICINE

The Journal of The KENTUCKY Medical Association

Diagnostic Ultrasound
John Queenan, M.D., Sandra Kubarych, R.N., Larry Griffin, M.D. and Garland Anderson, M.D. 595

Microvascular Surgery for Stroke Prevention
A. Byron Young, M.D., William Brooks, M.D., H. Martin Blacker, M.D. and Richard Mortara, M.D. 599

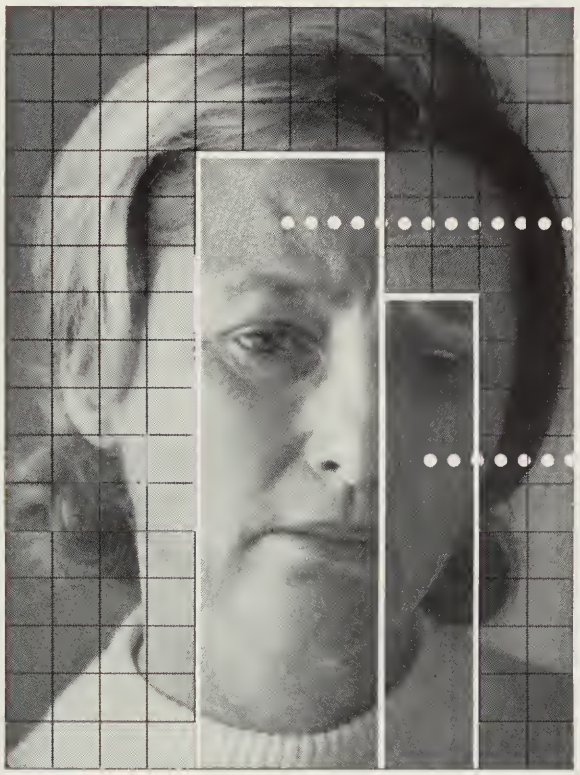
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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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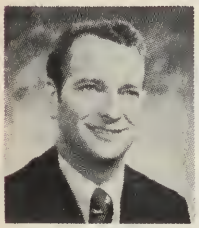
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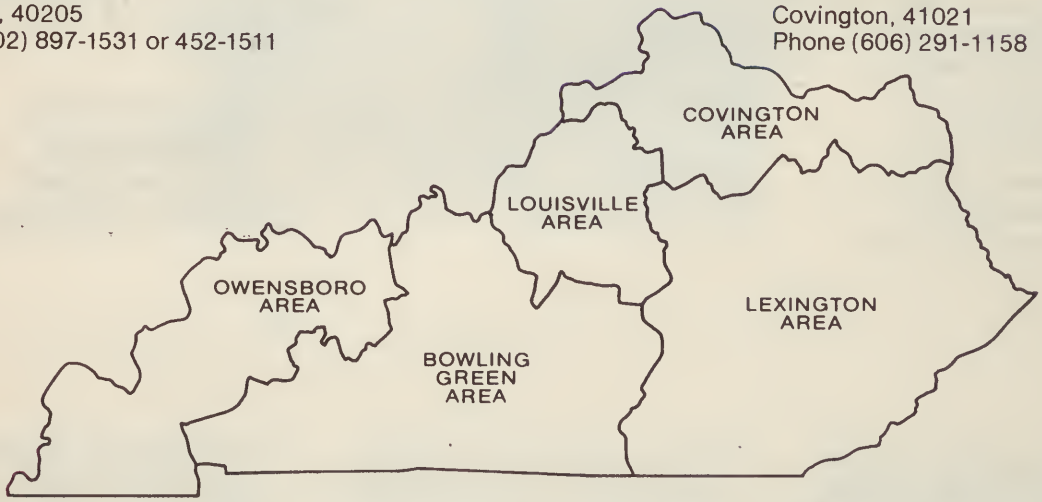
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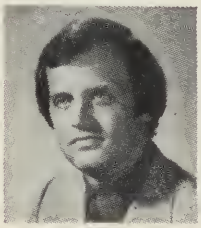
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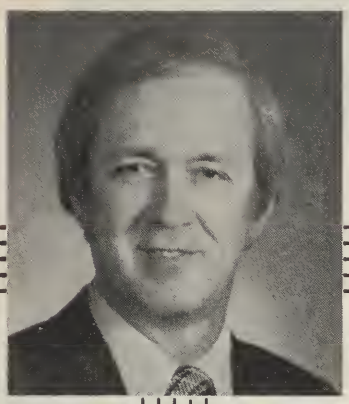
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MESSAGE FROM THE PRESIDENT



THE 1975 Kentucky Medical Association Annual Meeting is history now and from all aspects, a success. It never ceases to amaze me how physicians can "vent their spleen," have a great many divergent opinions and still in the end arrive at some sensible compromise position.

It is impossible to enumerate the many significant actions taken by the House of Delegates but foremost throughout everyone's mind seemed to be the problem of medical liability. Not only did the House endorse the dues increase needed by the Association for its operation during the next five years, but also significantly they assessed each member $50 to be used in the fight for some relief of the medical liability crisis.

As of this writing, your President has already become overwhelmed by the awesome responsibilities that go with this office. This is more significant it seems to me this year with the forthcoming General Assembly to be held at such a critical time. I pledge that I shall endeavor to do my best to see that your wishes are carried out.

As President of the Kentucky Medical Association, I would like to point out that this office is only the spokesman for the Association and particularly the Board of Trustees. The final responsibility and any credit that this year might bring lies with the Board of Trustees, its Executive Committee and any officers. It is hoped that you will remember that these trustees are your representatives and are working in your behalf. Please let them know of your desires, as well as your officers and KMA staff.

I look forward to the challenge given us.

David A. Shaw

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

NOVEMBER

13-14 9th Annual Symposium on Central Nervous System in the Newborn, Health Sciences Center, University of Louisville, Louisville

17 Symposium on Diabetes,** Health Sciences Center, University of Louisville, Louisville

20 Symposium on "Allied Health Professional's Role in Management of Rheumatoid Arthritis," sponsored by Kentucky Chapter, Arthritis Foundation, Breckinridge Inn, Louisville

26 "Antibiotic Therapy," **Health Sciences Center, University of Louisville, Louisville

DECEMBER

4 18th Annual Postgraduate Medical Seminar, "A Day on the Liver," Norton-Children's Hospitals, Louisville

11 "Electrolyte and Fluid Problems," **Health Sciences Center, University of Louisville, Louisville

19-20 "Rheumatic Disease: Management Options,"*, University of Kentucky Medical Center, Lexington

JANUARY

28 "Optimal Use of Blood Products," **Health Sciences Center, University of Louisville, Louisville

IN SURROUNDING STATES

NOVEMBER

16-19 Annual Scientific Meeting, Southern Medical Association, Miami Beach, Fla.

30-
Dec. 5 AMA Clinical Convention, Honolulu

DECEMBER

3-4 "Perspectives in Ophthalmology," Cleveland Clinic Educational Foundation, Cleveland

JANUARY

23-25 AMA National Leadership Conference, Chicago Marriott Motor Hotel, Chicago

28-
Feb. 1 American College of Psychiatrists, del Coronado Hotel, Coronado, Calif.

30-
Feb. 1 AMA Congress on Medical Education, Palmer House, Chicago

31-
Feb. 4 American Academy of Orthopedic Surgeons, Marriott-Rivergate, New Orleans

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Report From KMA Cancer Committee--

Cancer Center of the University of Louisville*

DURING the past 15 years faculty members at the University of Louisville health science schools have developed several outstanding cancer programs relating to the community and the Commonwealth, such as those in uterine cancer, oral cancer, radiotherapy and cancer education of medical and dental students. During the last three and one-half years, cancer research, education and service demonstration programs sponsored by the University have enjoyed a spurt of growth through a three-year Cancer Center Planning Grant from the National Cancer Institute. This has resulted in the creation by the Board of Trustees of an organization within the University, embracing all scientific schools of the University, called the Cancer Center. The Center has its own full-time director, administrative staff, space and budget; the affiliated faculty numbers more than 50 individuals. Many of these are newly recruited; most are established faculty members with large commitments to cancer research and teaching.

In these three and one-half years of planning the number of faculty oncologists (physicians and scientists completely committed to cancer and specially trained for it) has increased from 10 to 18, now representing all oncologic sub-specialties. Grant and contract money devoted to cancer research and cancer projects has been increased tenfold in this same period, amounting to well over $2 million annually. As a result of the organizational activities of the Center, a large number of relatively isolated scientists on the faculty of the University, both basic and clinical, have found a way to interact, communicate and cross-fertilize for the purpose of developing cooperative research projects. The atmosphere of interest in the cancer problem and in cancer research has been considerably heightened and deepened and research projects in the cancer area have increased five-fold. Old projects have been expanded and new areas have been developed. An outstanding example of the latter is the Vinyl Chloride Program which is rapidly becoming a national model for industrial carcinogenic surveillance and of University-private industry cooperation. A second example is the development of a section on medical oncology within the Department of Medicine in the Division of Hematology-Oncology; this section has two full-time medical oncologists, four fellows in training and plans for rapid expansion. A third example is the accomplishment of a comprehensive research, education and community outreach program in cancer of the breast. The Center's activities are supported by 40 individuals attached to its staff in directing and supporting positions for the various programs.

The Cancer Center has recently been surveyed for its application to become one of a national network of the regional cancer centers offering a full and wide range of programs, projects and tertiary patient care resources. The plans are in keeping with the regional mandate of the University of Louisville and its University Hospital to serve the region of Western Kentucky and the Louisville area. The Center will also be able to provide multidisciplinary consultations and tertiary care in this increasingly complicated and rapidly changing field of cancer for an even wider area of the country.

One objective of the Cancer Center implied in the statements made above is to insure an increase in excellence in cancer research. The field of cancer immunology deserves special attention to this regard; several new faculty oncologists have had extensive immunologic training and experience in this area of research. Special funds have been requested in the recent application for establishing a core immunology cancer research laboratory to aid various investigators with their own individual research studies. Another objective is to cooperate with, and assist, all of the cancer research and cancer outreach education and demonstration programs that are developing in various communities and cities in Kentucky, especially with the developing cancer program at the University of Kentucky. The Director has initiated a number of meetings with the cancer faculty at the University of Kentucky; agreement as to areas of mutual interest and cooperation has been reached. A further objective is to study, in depth, cancer problems that are peculiar to the Commonwealth of Kentucky. To this end, a developing staff in epidemiology and biostatistics at the Cancer Center becomes of major importance.

For the future, the University intends to have in the Medical Center in Louisville, adjacent to the University Hospital, a multipurpose Cancer Center building to house all the rapidly expanding programs, particularly the burgeoning Radiation Center program, with easy access, where multidisciplinary treatment plans and consultations can be carried on, and where highly specialized equipment and expert personnel may be found at any time.

In short, the University of Louisville Cancer Center envisions a role of service to the Kentucky physician and his patients characterized by excellence of research, distribution of latest information and provision of complicated tertiary care and consultation where appropriate.

**This article was written by Condict Moore, M.D., Director, Cancer Center, University of Louisville*

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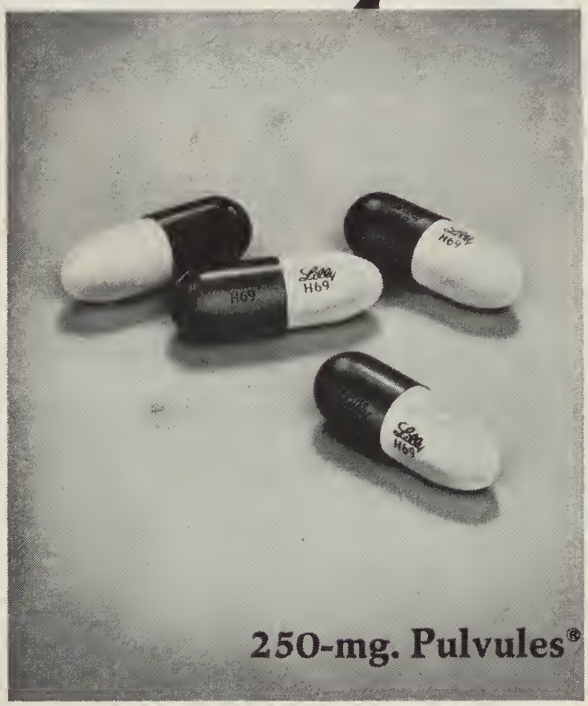
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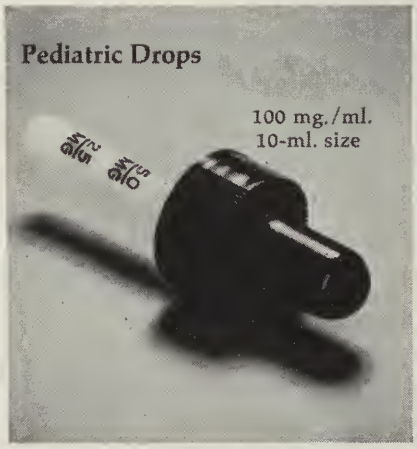
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Diagnostic Ultrasound: Determination of Fetal Biparietal Diameters as an Index of Gestational Age†

JOHN T. QUEENAN, M.D., SANDRA F. KUBARYCH, R.N., LARRY P. GRIFFIN, M.D. AND GARLAND D. ANDERSON, M.D.

Louisville, Kentucky

The use of B-mode ultrasonography for fetal biparietal diameter (BPD) measurements is an accurate method of assessing gestational age. Our results with 738 determinations in 468 patients are presented.

DIAGNOSTIC ultrasound is a non-invasive, non-radiation technique which is particularly suitable for obstetrics. Several investigators have reported its value in determining fetal biparietal diameters (BPD).[1-4] Furthermore, they have shown that the BPD's correlate to a specific gestational age. Since an accurate determination of fetal age and growth is crucial in making management decisions in obstetrics, diagnostic ultrasound is a valuable procedure.

Material and Methods

Seven hundred and thirty-eight ultrasound fetal BPD determinations were done on 468 patients between 17 and 43 weeks' gestation. Of these 468, 144 had two to six serial BPD determinations. The study group consisted of patients from the Louisville General Hospital clinic and those referred by private physicians.

Only patients with a known gestational age, i.e. first pelvic examination compatible (±1 week) with the LMP and who had no medical or obstetrical complications were included in this study. Patients were not excluded from the study group on the basis of time of delivery, which occurred from 33 to 43 weeks' gestation, as long as the above conditions were met and no evidence of dysmaturity was found on examination of the newborn and placenta.

The ultrasound scan was performed with the B-mode of a Unirad Sonograf II instrument utilizing a 2.5 MHz transducer (Fig. 1). Three Polaroid pictures of the fetal head with the falx cerebri centrally located were taken (Fig. 2). Scans in which the falx cerebri could not be definitely identified after the 20th week of gestation were excluded from the study. A centimeter scale was superimposed on each Polaroid picture at the time of the scan for measurement purposes. The fetal head was measured with calipers from the outer aspect of the fetal head to the inner aspect of the contralateral side (Figure 3, arrows). The average of the three measurements in which the falx cerebri was centrally located was used as the biparietal diameter. Each reading was

†*Request reprints from: Ultrasound Diagnostic Laboratory, Department of Obstetrics and Gynecology, University of Louisville, Louisville General Hospital, 323 East Chestnut St., Louisville, Kentucky 40202*
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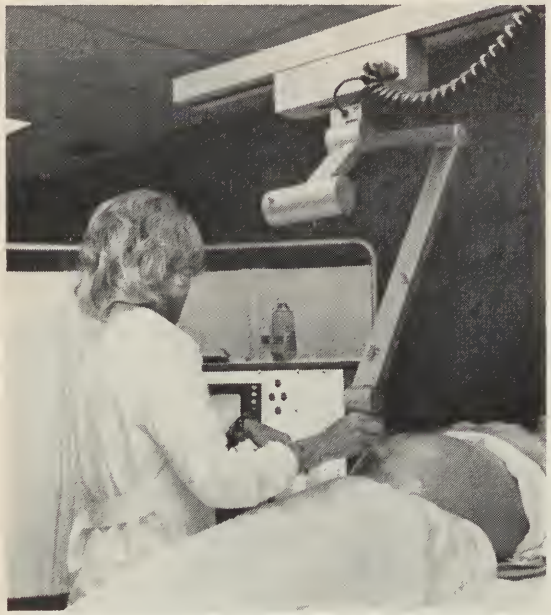


FIG. 1. Demonstrating the equipment and the technique of scanning.

performed by the same investigator.

The accuracy of ultrasound BPD measurements was studied. Seven patients underwent ultrasound BPD measurements prior to elective cesarean section without labor. The BPD of these neonates was measured with calipers within six hours of delivery. The correlation of the BPD determined ultrasonically with those of actual caliper measurement is shown in Table I. All values corresponded within 3 mm. These findings are consistent with those of other investigators who used B-mode or a combination of A-mode and B-mode.[2,3,5]

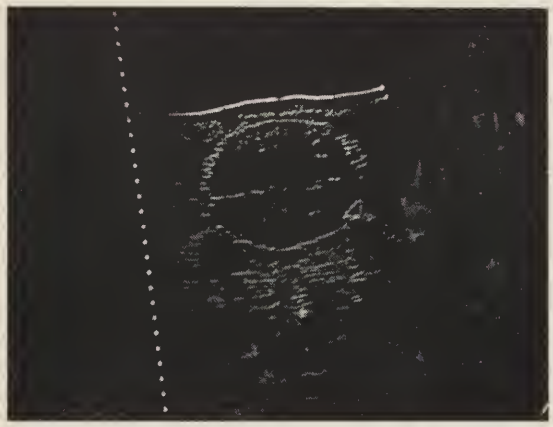


FIG. 2. Ultrasound scan of the fetal head demonstrating the falx cerebri properly located in the center. Note the superimposed centimeter scale for measuring the biparietal diameter.

Table I

ACCURACY OF ULTRASOUND BIPARIETAL DIAMETERS

	PRE C/S (cm)	POST C/S (cm)
1.	8.9	9.2
2.	9.1	9.0
3.	9.1	9.4
4.	9.2	9.4
5.	9.6	9.6
6.	9.6	9.9
7.	9.9	9.9

To demonstrate the reproducibility of the results obtained by the scanning technique, five patients at various stages of gestation underwent sonography for BPD measurement on four consecutive days. BPD measurements obtained in these patients were consistent from one day to the next with an error of 3 mm or less. (Table II)



FIG. 3. Ultrasound scan of the fetal head demonstrating the technique of determining the fetal BPD. Arrows represent the distance measured with calipers to obtain the fetal BPD.

Results

The values were plotted against the weeks' gestation as determined by Naegele's rule. BPD values were assigned to a specific week if the calculated gestational age fell within ± 3 days of that week. To determine the fetal

Table II

REPRODUCIBILITY OF SCANNING TECHNIQUE

PATIENT	DAY			
	1	2	3	4
	(cm)			
1	6.1	6.3	6.1	6.3
2	6.5	6.5	6.5	6.3
3	8.1	8.2	8.1	8.0
4	6.2	6.1	6.2	6.4
5	7.5	7.4	7.5	7.5

BPD of this population we have determined the mean ± 2SD for each week of gestation. This includes 95% of all BPD determinations for each week.

Table III demonstrates the mean biparietal diameter and the number of determinations obtained at each week from the 17th to the 43rd week of gestation as calculated by Naegele's rule. There was a low of nine determinations at 17 weeks and a high of 59 determinations at 37 weeks. The mean values ± 2SD are plotted against weeks' gestation on Figure 4 demonstrating a curve similar to the intrauterine growth curve of Battaglia and Lubchenco.[6] Increasing BPD are seen through the 43rd week in the normal population.

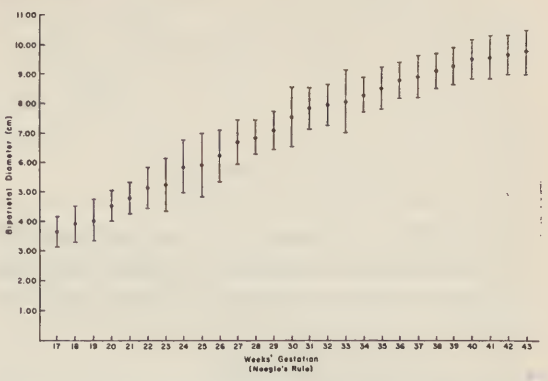


FIG. 4. The mean biparietal diameter obtained at each week of gestation from the 17th to the 43rd week as calculated by Naegele's rule.

Discussion

The most important factor in a study of fetal BPD is reliability of gestational dates. Every patient in this study had a gestational size compatible with the duration of amenorrhea on their initial examination. All patients with a known gestational age were included in this study. This differs from the study of Campbell who included only values of patients who delivered within one week of the calculated EDC.[7] Therefore, a number of preterm but normal neonates are included in this study but excluded in Campbell's study.

The B-mode ultrasound method of determining fetal BPD appears to be accurate and reproducible. From a practical standpoint, the BPD is very helpful in determining fetal age in pregnancies where the menstrual dates are in question. But, since the actual size of the fetal head varies in normal pregnancy a single value cannot be used as an absolute indication of gestational age. As an extreme example, a BPD of 8.8cm corresponds to a mean gestational age of 36 weeks. But this value could be

Table III

MEAN BIPARIETAL DIAMETER AND GESTATIONAL AGE

Weeks Gestation	Mean (Cm.)	± 2 S.D. (Cm.)	No. Determinations
17	3.655	0.500	9
18	3.906	0.602	15
19	4.057	0.700	19
20	4.531	0.516	19
21	4.799	0.532	12
22	5.126	0.696	23
23	5.255	0.884	25
24	5.866	0.898	12
25	5.912	1.108	16
26	6.227	0.872	29
27	6.699	0.750	24
28	6.863	0.566	11
29	7.107	0.672	14
30	7.552	1.010	34
31	7.865	0.692	26
32	7.970	0.684	24
33	8.089	1.046	29
34	8.303	0.594	32
35	8.528	0.714	35
36	8.797	0.594	47
37	8.908	0.700	59
38	9.113	0.590	53
39	9.287	0.614	40
40	9.512	0.650	33
41	9.573	0.724	26
42	9.641	0.664	24
43	9.772	0.704	11

found with a fetus at 34 or 39 weeks' gestation depending on whether the fetal BPD falls at the upper or lower limits of normal. This could represent an error of ± 2-3 weeks if an absolute gestational age is assigned on the basis of a single BPD measurement.

If proper technique is employed the ultrasound BPD is accurate. It should be used to ascertain fetal maturity prior to repeat cesarean section and elective induction of labor to avoid iatrogenic prematurity.

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Microvascular Surgery for Stroke Prevention†

A. Byron Young, M.D., William H. Brooks, M.D., H. Martin Blacker, M.D. and Richard H. Mortara, M.D.

Lexington, Kentucky

Forty per cent of patients with transient ischemic attacks have arterial lesions not correctable by conventional vascular surgery. The authors describe new microsurgical cerebral revascularization procedures designed to prevent strokes by augmenting cerebral blood supply.

RECONSTRUCTIVE vascular surgery is widely used for preventing strokes due to segmental atherosclerotic lesions in the extracranial carotid and vertebral arteries. However, 40% of patients with transient ischemic attacks studied by angiography have lesions which are either inaccessible or not correctable by conventional vascular operations.[3] This therapeutic deficiency may allow the occurrence of a neurologic catastrophe, because 15-35% of patients with transient ischemic attacks eventually suffer a stroke.[4] This report describes recently developed microsurgical cerebral revascularization procedures which bypass these surgically inaccessible arterial lesions. The objective of these new microvascular operations is to prevent development of disabling permanent neurologic deficits by augmenting cerebral blood flow.

Physiologic Basis for Microsurgical Cerebral Revascularization

Collateral circulatory pathways develop when an area of the brain is deprived of its primary blood supply. The classic pattern of collateral circulation occurs with gradual obstruction of the internal carotid artery in the neck. This occluded segment is bypassed by flow from the external carotid artery to the intracranial internal carotid artery via the internal maxillary, ethmoidal and ophthalmic arteries (Fig. 1). Additionally, collateral channels to the intracranial internal carotid artery may also develop through the connections of the superficial temporal and middle meningeal arteries with the ophthalmic artery.[6] These natural patterns of collateral circulation are the basis for microsurgical cerebral revascularization procedures which are designed to augment inadequate collateral circulatory pathways.

Microsurgical Cerebral Revascularization Procedures

Superficial Temporal Artery to Middle Cerebral Artery Anastomosis

The superficial temporal artery to middle cerebral artery cortical branch anastomosis is the most frequently performed reconstructive microvascular procedure. The superficial temporal artery is isolated from a frontotemporal scalp flap. A small craniotomy and dural opening exposes the temporal lobe surface adjacent to the Sylvian fissure. A cortical branch of the middle cerebral artery, at least 1.5 mm in diameter, is selected and separated from its arachnoid covering. An end-to-side

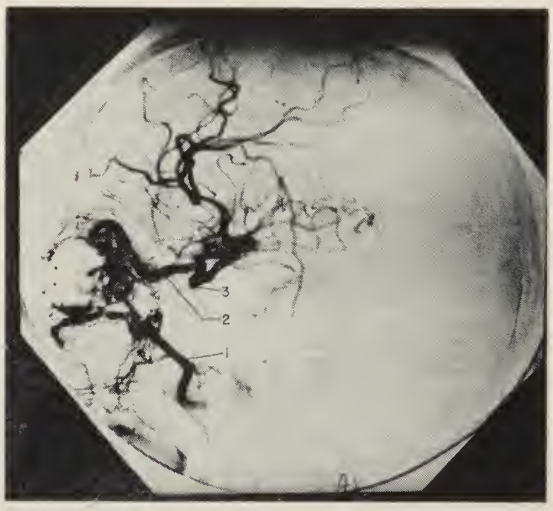


FIG. 1. Bilateral occlusion of the internal carotid artery. External carotid arteriogram, lateral projection. The internal maxillary branch (1) of the external carotid artery supplies the orbital vessels. Retrograde flow from the ophthalmic artery (2) fills the supracavernous internal carotid artery (3) and its intracranial branches.

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anastomosis between the superficial temporal artery and the cortical branch of the middle cerebral artery is fashioned using the operating microscope for 25 power magnification (Fig. 2).[10]

Alternative Cerebral Revascularization Procedures

An anastomosis sometimes can be accomplished between both frontal and parietal branches of the superficial temporal artery and separate cortical arteries.[1] The superficial temporal artery may also be connected to the supraclinoid internal carotid artery or proximal middle cerebral artery. If the superficial temporal artery is less than 1 mm in size, the external occipital artery is substituted for the anastomosis to the middle cerebral artery cortical branch.[7] Others have constructed a common carotid artery to intracranial internal carotid artery anastomosis using the saphenous vein as the bypassing vessel (Fig. 3).[5]

Surgical Indications and Contraindications

The basic indications for considering microvascular surgical treatment of cerebrovascular occlusive disease are the following:

1. Transient or progressive ischemic neurologic symptoms.
2. Angiographic demonstration of an arterial lesion definitely responsible for the ischemic neurologic dysfunction.
3. Bypass of the arterial lesion can be expected to improve neurologic function or prevent development of a severe neurologic deficit.
4. The operative risk must be less than the risk of the natural course of the disease.[5,9]

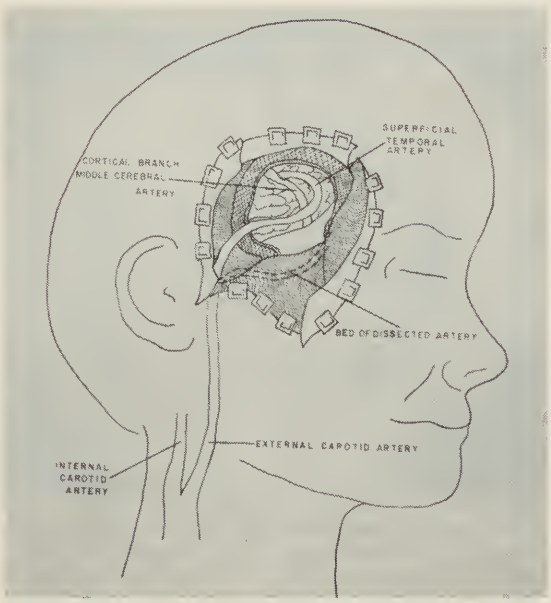


FIG. 2. Superficial temporal artery to middle cerebral artery cortical branch anastomosis.

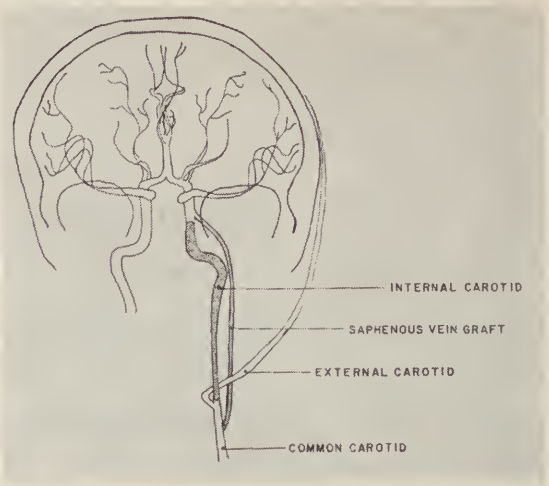


FIG. 3. Common carotid artery to intracranial internal carotid artery bypass with saphenous vein.

Microsurgical revascularization procedures should be considered only for the treatment of cerebrovascular occlusive lesions which are inaccessible by generally accepted extracranial vascular reconstructive procedures, such as carotid endarterectomy. Examples of these lesions are chronic complete obstruction of the internal carotid artery, consecutive or "tandem" internal carotid artery lesions in which the distal intracranial lesion is more stenotic than the proximal lesion, and occlusive lesions of the major intracranial vessels (Fig. 4).

Transient ischemic attacks are usually due to embolization of fragments originating from ulcerated atherosclerotic plaques. The removal of this embolic source is the primary goal of carotid endarterectomy. Less frequently, cerebral ischemia is caused by occlusive cerebrovascular lesions which produce "low perfusion states".[8,9] Occlusive arterial lesions are often multiple and bilateral, and the collateral circulation is frequently inadequate. The resulting ischemic symptoms may be persistent, progressive or transient, and secondary to generalized or localized cerebral dysfunction. Microsurgical cerebral revascularization procedures are specifically appropriate for transient or mild progressive neurologic deficits due to ischemia localized to the middle cerebral artery distribution.

The mechanism by which cerebral revas-

cularization sometimes improves mild neurologic deficits remains debatable. Apparently, brain tissue with a marginal blood supply may be non-functional but revivable if adequate cerebral perfusion is restored. Cerebral revascularization procedures are contraindicated for severe permanent neurologic deficits, because infarcted brain tissue is not enlivened by simply reconstituting its blood supply.[10]

Results

Between 60-100% of superficial temporal middle cerebral artery anastomoses have been angiographically proven to be patent weeks to months postoperatively.[1,2] Vessel opacification varies from filling of the entire middle cerebral artery complex to filling of only one or two branches. Retrograde filling of the larger central arteries occasionally occurs. Serial studies sometime show progressive enlargement of the anastomotic vessels.

The clinical effectiveness of these operations are related to the incidence of anastomosis patency. However, the extensiveness of the collateral supply does not directly correlate with the clinical results. Patients with the greatest improvement may have a small collateral flow contribution. Others demonstrate little or no improvement despite extensive collateral circulation. Perhaps clinical improvement in these latter cases is limited to preexisting brain damage.[1]

Less than 300 reported operative cases are available for analysis. Preliminary studies indicate mild neurologic deficits and the frequency of transient ischemic attacks is decreased. A recent report indicates 18 to 19 patients with transient ischemic attacks were improved or asymptomatic following superficial temporal artery bypass surgery.[1] Other reports indicate significant clinical improvement in two-thirds of their cases.[2,10]

Neurologic complications from superficial temporal artery bypass procedures are infrequent, because a small cortical vessel rather than the intracranial carotid artery or middle cerebral artery is used for the anastomosis.

Conclusion

Microsurgical cerebral revascularization procedures appear to benefit patients with transient ischemic attacks caused by occlusive cerebrovascular disease. These operations should only be considered for arterial lesions not correctable by conventional general vascular extracranial approaches. Postoperative neurologic complications are infrequent.

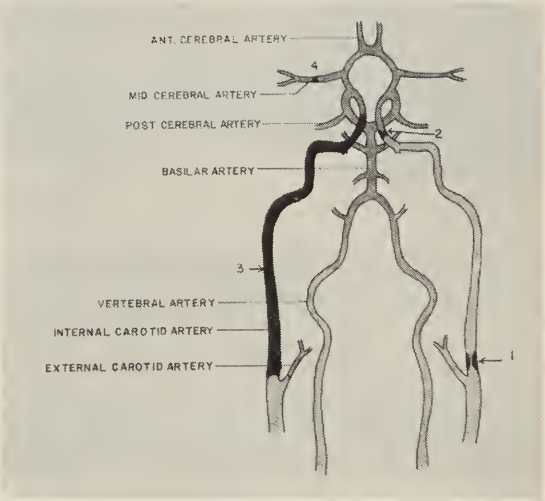


FIG. 4. Examples of lesions inaccessible by conventional vascular operations. (1) and (2) "Tandem" internal carotid artery lesion. (3) Obstruction of the internal carotid artery from the bifurcation to the supracavernous segment. (4) Middle cerebral artery obstruction.

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Update on Ampicillin-Resistant Hemophilus Influenzae†

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Because of the recent rapid emergence of ampicillin-resistant Hemophilus influenzae across the United States it is now recommended that chloramphenicol be considered in initial therapy of all serious infections by this organism.

IN February, 1974, the first case of ampicillin-resistant *Hemophilus influenzae* infection in the United States was reported from Maryland.[1] By the end of the year there were reports from two other states and the District of Columbia. We reviewed this situation for Kentucky physicians in December, 1974, alerting them to the possiblity of emergence of strains in Kentucky.[2]

To our knowledge at the time of this writing there have still not been any proven ampicillin-resistant *H. influenzae* in the state of Kentucky. David Wilson, M.D., of the Department of Pediatrics of the University of Kentucky School of Medicine has been very close to the situation, testing many strains in his laboratory. He has not yet encountered ampicillin-resistant *H. influenzae* from Kentucky.[3]

Nevertheless, these resistant strains are rapidly emerging across the United States. Presently, 23 states and the District of Columbia are reporting ampicillin-resistant *H. influenzae,* including five out of seven adjacent states (Fig. 1).[4] Because of this the recommendation that we made in the *Journal* 11 months ago that ampicillin alone could still be used as initial therapy for serious Hemophilus

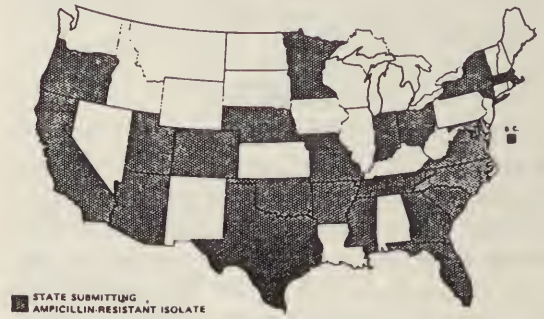


Figure 1

infections in Kentucky no longer seems prudent.

The Center for Disease Control has recommended that chloramphenicol be included in the initial therapy of all serious infections in which *H. influenzae* is proven or suspected.[4] We concur in this and recommend that this policy be applied in Kentucky at this time.

All such strains should of course be tested for ampicillin sensitivity, and that drug substituted for the more toxic chloramphenicol as soon as it is known that the *H. influenzae* strain in question is sensitive to it. Special care should be observed in following the recommended dosage schedule for chloramphenicol and in appropriate serial hematologic screening for early evidence of bone marrow depression. Further discussion of the subject may be found elsewhere. Readers are encouraged to follow recommendations on this and other related subjects in the Morbidity and Mortality Weekly Report of the Center for Disease Control.

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GRAND ROUNDS

The University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

The Diagnosis and Management of Genitourinary Trauma*

TRAUMA, both blunt and penetrating, to the genitourinary system has become of more and more significance with the development of the high-speed automobile as well as in the setting of increasing societal violence. As better methods of initial evaluation and therapy to the injured patient have been developed, more patients are surviving the immediate post-trauma period thus allowing for evaluation and effective management of injuries to the genitourinary system. As in any patient suffering trauma, rapid initial evaluation is important with the attention to airway, cardiovaseular and pulmonary status. General supportive and diagnostic measures should be undertaken promptly before specific diagnostic studies are done. In any patient suffering serious trauma, multiple systems involvement must be eonsidered and ruled out as soon as the patient is in condition to undergo the necessary procedures. Not infrequently, the genitourinary tract is involved in cases which present as gastrointestinal trauma, skeletal, splenic, liver, pulmonary or thoracie injuries. The unconscious patient may well be at risk for multiple systems injury and attention to these other systems is mandatory.

While urinary tract injuries are less common than damage to other structures of the body, such injuries require careful consideration because of the morbidity and mortality they can produee and because their initial treatment is especially critical in preventing secondary complieations. The purpose of this morning's Grand Rounds is to present three patients who had sustained trauma to the genitourinary tract and discuss the appropriate diagnostic studies and management.

Case #1: Renal Contusion in a Diseased Kidney.

W. W., a 22-year-old white male was apparently in good health until losing control of his motorcycle on the day of admission. The history revealed that he had struck the left side of his abdomen and flank on a fence post. There was no loss of consciousness and he was seen in his area hospital where evaluation revealed abdominal pain, gross hematuria and a fractured fifth metatarsal on the left. Past medieal history, review of systems and family history were all non-contributory.

Significant findings upon physieal examination revealed an abrasion on the left upper quadrant and flank with tenderness in the left upper quadrant and flank. There was no guarding or rebound felt. No masses were palpable. The left forefoot was swollen and tender.

Laboratory: The blood eount was completely within normal limits as were the electrolytes, BUN and glueose. Urinalysis revealed gross hematuria only.

Chest x-ray was normal. On exeretory urogram, IVP (Fig. 1), there was noted an enlarged left kidney with marked dilatation of the calices which contained filling defects which probably represented blood clots. A cystogram was negative.

The patient was treated conservatively with bed rest and fluids. His hematuria cleared completely and the patient was discharged home to

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FIG. 1 Contusion of Hydronephrotic Left Kidney

return for elective reparative surgery of the kidney.

The final diagnosis was abdominal trauma, renal contusion and chronic ureteral pelvic junction obstruction.

Case #2: Ureteral Transection.

P. F., a 12-year-old white female, previously in excellent health, was struck by an automobile and dragged approximately 20 feet. The patient was initially unresponsive and motionless. She was transported to a local hospital and upon arrival there was noted to be moaning, screaming and moving about irrationally. She was immediately transferred to the University of Kentucky Medical Center for evaluation.

Past medical history, review of systems and family history were non-contributory.

On physical examination, significant findings consisted of pain and swelling of the right ankle with external rotation and pain on hip motion.

On neurological examination, she was noted to be somewhat obtunded and oriented to person only and moving about in a thrashing manner.

Significant laboratory findings were a white blood count of 25,000, a normal hemoglobin and hematocrit and normal electrolytes, BUN and glucose. Urinalysis was initially normal but later revealed 8-10 RBC/H.P.F.

On x-ray it was noted that there were fractures of the left superior and inferior pubic rami and a fracture of the superior margin of the symphysis on the right. There was also a transverse fracture through the first sacral foramen with slight separation of the left sacral iliac joint. Skull X-rays revealed a basilar skull fracture. On excretory urography (Fig. 2) it was noted that there was extravasation of contrast media lateral to L-3 on the right. A cystogram revealed no extravasation and the right distal tibia was noted to be fractured but with good alignment. A right retrograde pyelogram confirmed a right ureteral transection at L-3.

The patient was taken to the operating room where she underwent exploratory laparotomy and was found to have a through-and-through, complete transection at the proximal right ureter. A primary anastomosis was carried out with stenting and the patient did well and was discharged on her 13th postoperative day.

Case #3: Transection of Urethra.

J. W., a 19-year-old white male was in excellent health until he was thrown from a vehicle landing on his buttocks. The patient was taken to a nearby hospital where a fracture of the pelvis was diagnosed. Contrast media was injected through a Foley catheter with the findings of extravasation from the membranoprostatic urethra. The patient was then referred to the University of Kentucky Medical Center for further evaluation.

Past medical history, review of systems and family history were all non-contributory.

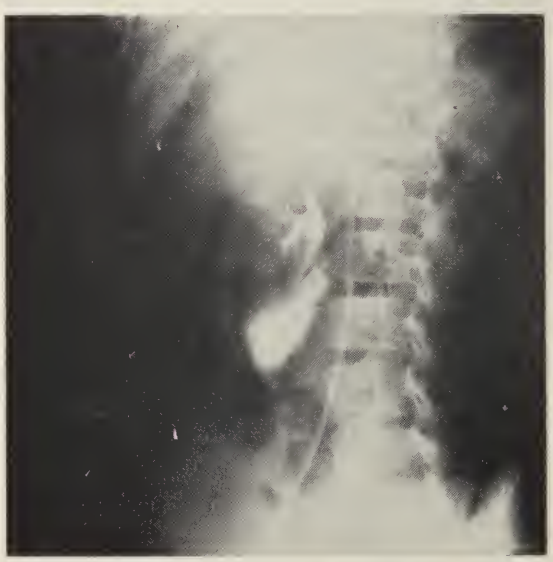


FIG. 2 Complete Transection of Right Ureter with Extravasation

Significant findings on physical examination revealed scattered superficial lower abdominal abrasions. The bowel sounds appeared decreased and the lower abdomen and pelvis were tender with rebound. Rectal examination revealed a free-floating prostate. The genitalia appeared normal.

Laboratory studies revealed a WBC of 19,400 and a normal hematocrit and hemoglobin. Electrolytes, BUN and glucose were within normal limits.

Significant x-ray findings disclosed on excretory urography (IVP) a mild bilateral hydronephrosis which was possibly due to a low grade obstruction from a pelvic hematoma. In addition, there was a fracture of all four pelvic rami with some fragmentation. On the retrograde cystourethrogram, it was noted that there was extravasation of contrast in the area of the bulbous and membranous urethra (Fig. 3).

The patient was taken to the operating room where a suprapubic tube was placed in the bladder and the perivesical areas were drained with Penrose drains. Postoperatively the patient did well and was discharged on his fifth postoperative day to return for a delayed urethroplasty.

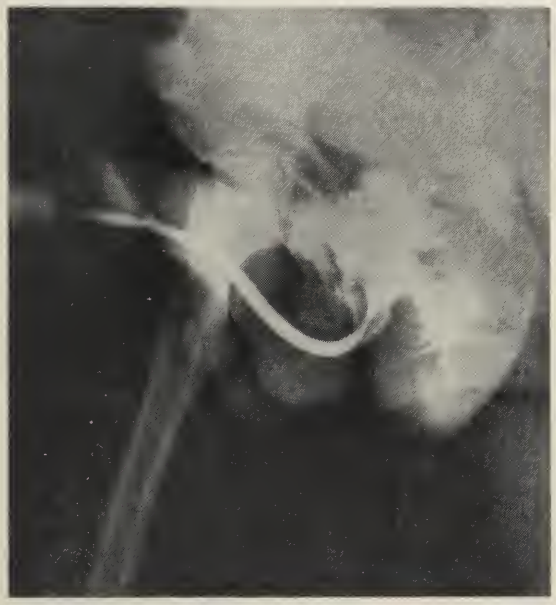


FIG. 3 Transection of Urethra with Extravasation

Discussion

After stabilization of the patient's general condition and concomitant with evaluation and diagnosis of other injuries, utilizing a simple flow chart (Fig. 4), an orderly approach for the diagnosis of genitourinary tract injuries can be established. On the physical examination, one should look specifically for enlargement or ecchymoses of the flanks. Palpation of the ribs for fractures should be carried out as well as the usual abdominal examination. Palpation of the pubis and hips is carried out to evaluate any possible fractures in these areas. Digital rectal examination is carried out in the male to determine the position of the prostate and to establish whether or not it is displaced. The patient should not be asked to void, since if there is either complete or partial rupture of the urethra, the patient would then contribute to additional extravasation of urine into the surrounding tissues.

If the prostate is in normal position, or if the patient is female, an attempt is then gently made to pass a Foley catheter into the bladder and, if this succeeds, the catheter is left in place as subsequent attempts at catheterization may be impossible despite initial success. Clear or slightly blood-tinged urine from the bladder suggests that possibly no significant bladder injury has occurred but this finding does not exclude urethral injuries. If no urine is obtained, the catheter may be in an empty, uninjured bladder or it may be outside in the retropubic space or beneath the trigone. No matter how confident the clinical impression, in every case a retrograde cystogram is indicated to establish the position of the catheter and the status of the bladder. If the catheter cannot be passed gently into the bladder, a retrograde urethrogram is carried out with the Foley balloon partially inflated and the catheter wedged in the anterior urethra. This will disclose any possible rupture of the urethra.

Table I
Flow sheet for evaluation and management of genitourinary trauma.

I. General:
  * 1. Rapid evaluation and treatment of airway, cardiovascular and pulmonary status.
  * 2. Evaluation of other organ systems.

II. Specific:
  * 1. Foley catheter
    a. Urinanalysis
    b. Urethrogram
    c. Cystogram
  * 2. Excretory urogram (IVP)
  3. Cystoscopy and retrograde pyelography
  4. Arteriography
  5. Surgery

*MUSTS

An excretory urogram (IVP) is done next in an effort to delineate the upper urinary tract. It must be remembered that abnormal kidneys are more easily traumatized and apparently insignificant trauma may cause injury. The possibility should be considered whenever hematuria follows a trivial blow, particularly in children with their resilient thoracic cage and less protected kidneys (Fig. 1). One should use large doses of contrast media, given in a bolus. The findings of an extravasation of contrast media will help to classify the severity of the injury of the kidneys and, just as importantly, ascertain the status of the uninvolved contralateral kidney. Renal angiography, where available, can also be helpful in outlining the degree of renal injury. Cystoscopy and retrograde pyelography are occasionally undertaken if there is no visualization on IVP and will aid in determining if there is disruption of the kidney cortex.

There are essentially three types of renal injury and are as follows in increasing order of severity. The least serious is the renal contusion which may show hematuria and little else. The second type, the renal laceration, implies disruption of the cortex which may extend into the renal pelvis. Again, hematuria is present and there is the possibility of brisk hemorrhage. The third type is total rupture and disruption of the kidney. This is obviously the most serious as frequently the renal artery is involved and the patient may rapidly exsanguinate if appropriate measures are not taken.

The method of treatment—conservative or operative—will depend on the severity of the renal injury, associated injuries, as well as the general condition of the patient. The treatment of blunt renal trauma has swung towards the conservative expectant approach recently. Immediate surgical intervention has become less and less appropriate if the patient can be managed by transfusions and bedrest. A rough rule of thumb, which might be considered, is that if, after four units of blood, the patient has not stabilized and is requiring additional transfusions, conservatism should probably be abandoned and transabdominal exploration undertaken. The transabdominal surgical approach allows for early control of the renal pedicle before Gerota's capsule is entered and will often times allow the kidney to be repaired and salvaged rather than be removed. While conservative management does have some risks of secondary hemorrhage, hypertension or developments of hematomas and urinomas, it is our belief that such risks are acceptable if the patient can be handled with nonoperative measures.

On the other hand, we are more aggressive in the management of the penetrating injury of the kidney. We feel that penetrating injuries almost always require exploration and repair if possible as opposed to the conservative management of blunt injuries.

Ureteral injuries from trauma (Fig. 2) are unusual since the ureter is a small, well protected structure. However, they do occur and must always be considered. This injury usually occurs from a penetrating injury such as a missile or knife, but can be the result of blunt trauma. The urine analysis may be negative if there is complete transection of the ureter or the ureter is blocked by clots. When such an injury is found, the patient should be explored promptly and a primary repair of the ureter undertaken. The area should be well drained and the ureter stented by a ureteral catheter.

Bladder injuries are not uncommon and may be classified as contusion, intraperitoneal rupture or extraperitoneal rupture. A cystogram is the definitive study in this case and the bladder should be filled to capacity by gravity and x-rays made both while filled and when emptied since the latter film may reveal extravasation hidden by the opaque shadow of a full bladder. Intraperitoneal injuries usually occur from blunt trauma to a full bladder and the x-rays will disclose contrast media outlining loops of bowel. The extraperitoneal rupture is usually associated with fractures of the pelvic region and again the cystogram is definitive in outlining the possible injury. When a bladder rupture is diagnosed, the treatment is surgery after stabilization of the patient. A Foley catheter, which is used for the cystogram, should be left in place to provide drainage and closure of the bladder and drainage of the perivesical or intraabdominal areas should be carried out. On the other hand, less severe injuries of the bladder, such as contusion with only slight, insignificant extraperitoneal extravasation may be treated conservatively with an indwelling urethral catheter for 10 to 12 days.

One of the most perplexing management problems in genitourinary trauma is the patient presenting with complete rupture of the pros-

statomembranous urethra (Fig. 3). Such an injury usually occurs by a shearing force which disrupts the membranous urethra at the level of the genitourinary diaphragm. The prostate will then become free-floating and be displaced upward. If, on the urethrogram, the rupture is incomplete and a Foley catheter can be placed in the bladder, no further efforts should be made at repair. If, on the other hand, the rupture appears complete, there are two possible methods of management: suprapubic catheter with perivesical drainage and delayed urethroplasty; or immediate, primary urethroplasty.

Currently, we are not generally attempting primary repairs of the urethra. A cystostomy is done, a suprapubic tube is inserted, drains are placed about the bladder and the incision is closed. The alternative method of closure is a primary repair of the urethra, usually through a symphysiotomy or perineal approach. The problem with immediate repair of the severed ends of the urethra is that while there is a higher incidence of severe strictures when repair is postponed, the incidence of impotence is much increased when immediate urethroplasty is carried out. Thus, we feel that by providing drainage initially and then treating the resultant stricture secondarily, a better overall result can be obtained and potency can be retained in a fair proportion of the patients. It is only the occasional, highly selected patient with complete severence of the prostatomembranous urethra that is a candidate for primary suture-anastomosis.

Genital trauma is not uncommon particularly in a farming area. The "power takeoff" injury on farm machinery is well known and results in an evulsion of the genitalia or the genital skin. In such patients, a catheter should be inserted immediately in the urethra and debridement carried out. Every effort should be made to preserve both function and cosmetic appearance. Frequently, the testes can be covered loosely either by remaining scrotal skin or by implantation into the inner thigh. The penis if denuded can be covered with split thickness skin grafts or buried in the abdomen and the urine diverted.

In summary then, genitourinary trauma can be managed in an orderly fashion using a "flow sheet" approach (Table 1) which will provide the patient with the best opportunity for a full recovery, free of secondary complications.

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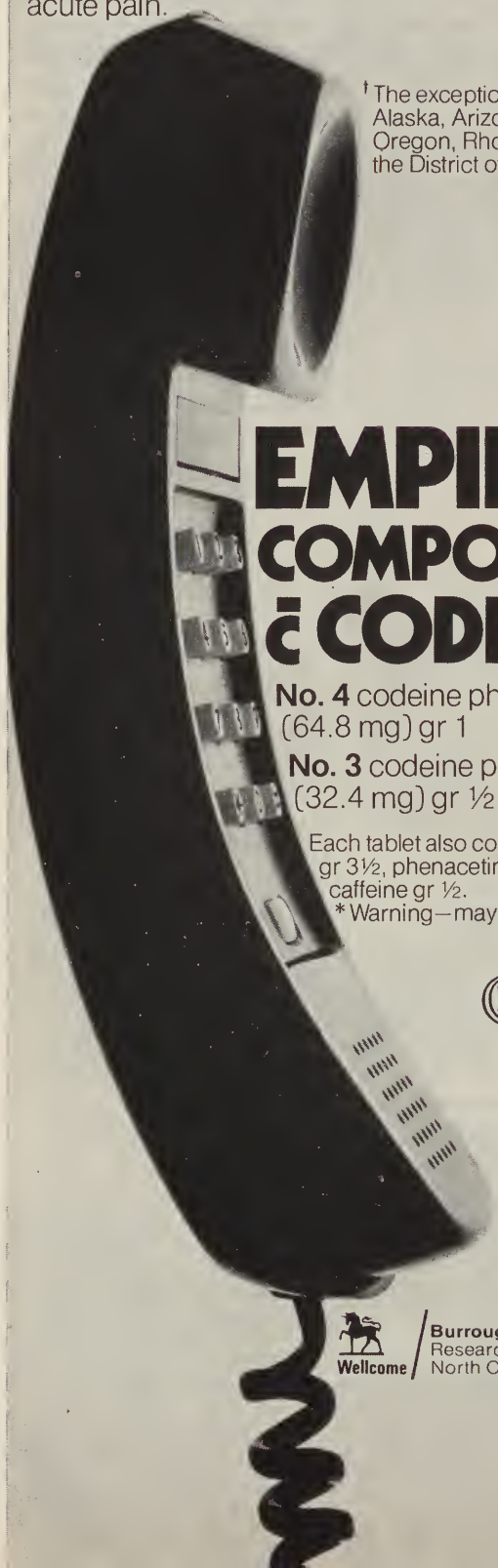
CORRECTION

The name of the author of the Grand Rounds contribution in the July issue of *The Journal* was inadvertently omitted. **Michael Daugherty, M.D.,** Lexington, authored the article entitled "Cholestatic Jaundice."

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Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with special caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis. In severe dehydration or electrolyte imbalance, withhold Lomotil until corrective therapy has been initiated.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage. Use with care in patients with acute ulcerative colitis and discontinue use if abdominal distention or other symptoms develop.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing, hyperthermia, tachycardia and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria, paralytic ileus, and toxic megacolon.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, hyperthermia, tachycardia, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. A narcotic antagonist may be used in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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This rapid action can halt the emergency aspect of diarrhea and is comforting and reassuring to the patient. Electrolyte and fluid losses can be corrected while the specific cause of the diarrhea is being determined. If an infective agent is the cause, appropriate specific therapy should be given along with Lomotil.

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Each tablet and each 5 ml. of liquid contain: diphenoxylate hydrochloride 2.5 mg. (Warning: May be habit forming), atropine sulfate 0.025 mg.

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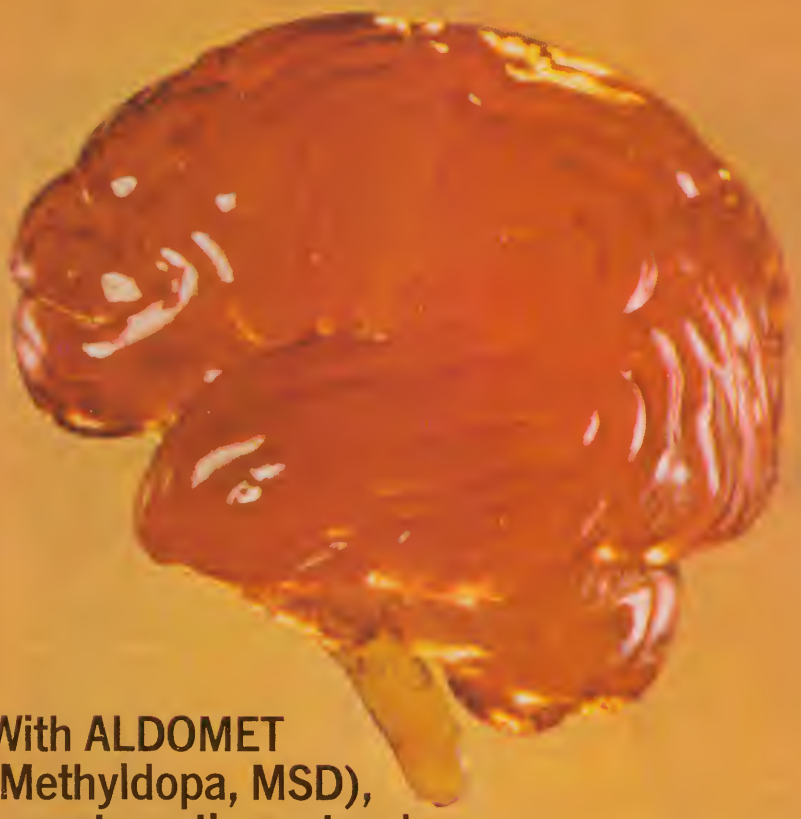


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ALDOMET has no direct effect on renal function. When used in effective doses, ALDOMET usually does not reduce glomerular filtration rate, renal blood flow, or filtration fraction.

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ALDOMET has no direct effect on cardiac function. When ALDOMET is used in effective doses cardiac output is usually maintained with no cardiac acceleration; in some patients the heart rate is slowed.



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ALDOMET reduces both supine and standing blood pressure. Less frequent symptomatic postural hypotension is experienced with ALDOMET than with many other antihypertensive agents. Exercise hypotension and diurnal blood pressure variations rarely occur.

for hypertension

TABLETS, 250 mg, 500 mg, and 125 mg

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ALDOMET is contraindicated in active hepatic disease, hypersensitivity to the drug, and if previous methyldopa therapy has been associated with liver disorders. It is not recommended in pheochromocytoma.

It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. For more details see the brief summary of prescribing information.

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For a brief summary of prescribing information, please see following page.

addendum

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to further simplify therapy for many patients

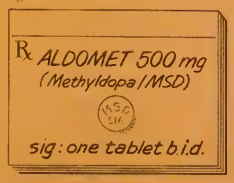
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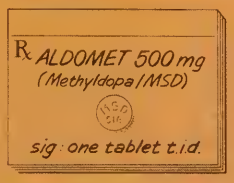
Now offered in addition to the standard 250-mg tablet, the new ALDOMET 500 mg tablet is a patient convenience. An especially important one, since in hypertension convenience of the dosage schedule is one factor that can make the difference in compliance of the patient. The minimum daily dose of ALDOMET is 250 mg b.i.d. The usual starting dose is 250 mg t.i.d. Dosage is adjusted as necessary by adding or deleting 250 mg or 500 mg at intervals of not less than two days. The maximum dose is 3.0 g per day.

Examples of b.i.d. or t.i.d. dosage convenience provided by ALDOMET 500 mg within the usual daily dosage range of 500 mg to 2.0 g:

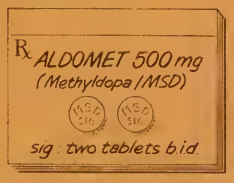
1.0-g daily dose =

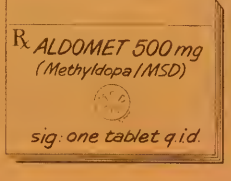


1.5-g daily dose =



2.0-g daily dose =





NOTE: Tablets shown are not actual size.

in hypertension

ALDOMET® (METHYLDOPA|MSD)

usually lowers blood pressure effectively



Contraindications: Active hepatic disease, such as acute hepatitis and active cirrhosis; if previous methyldopa therapy has been associated with liver disorders (see Warnings); hypersensitivity.

Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reactions or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings). May interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery. Methyldopa is not recommended for patients with pheochromocytoma. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by this procedure.

Adverse Reactions: *Central nervous system:* Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness, symptoms of cerebrovascular insufficiency, paresthesias, parkinsonism, Bell's palsy, decreased mental acuity, involuntary choreoathetotic movements; psychic disturbances, including nightmares and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease daily dosage). Edema (and weight gain) usually relieved by use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, constipation, flatus, diarrhea, mild dryness of mouth, sore or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia. Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, myocarditis.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, dermatologic reactions including eczema and lichenoid eruptions, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensives other than thiazides. Tolerance may occur, usually between second and third month of therapy; increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. Syncope in older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower doses.

How Supplied: Tablets, containing 125 mg methyldopa each, in bottles of 100; Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 1000; Tablets, containing 500 mg methyldopa each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME

EDITORIAL

The Medical Establishment Has Become a Major Threat to Health

The inadvertent contamination of intravenous fluids, catheters and commercial culture media, abrupt cessation of propranolol therapy for angina pectoris may produce life-threatening complications, tetracycline suppresion of leucocyte function or decrease in glomerular filtration, the necessity of colectomy for toxic megacolon induced by clindamycin administration, steroid aerosols may produce laryngeal candidiasis, aspirin hepatotoxicity in patients with RA and SLE, cyclophosphamide induced bladder carcinoma, the expert opinion that intermittent partial pressure breathing use is often harmful, methoxyflurane-associated hepatitis, the hazards of invasive technics generally, and even the London physician who believes the treatment of hypertension after the age of sixty is an ineffectual and money-wasting endeavor are facts emphasizing the potential harm we may do.

"The medical establishment has become a major threat to health" is the first sentence in the introduction to a little (183 pages) book by Ivan Illich[1] published early this year. The initial statement bowls you over, produces rebellious anger and piques your curiosity to read further and learn that the book is "an outline for a seminar" and is "the first published version of a book which is still in the process of being written." With this and the promise of more to come I read on, for Illich (Monsignor Illich, a Ph.D. who was a protege of Francis Cardinal Spellman in the New York diocese, now at and co-founder of the Center for Intercultural Documentation in Cuernavaca, Mexico) has much to say about us, the medical profession.

Illich cites iatrogenesis in three categories: clinical iatrogenesis which includes the damage we do in curing and exploiting the patient and that which results from our attempts to protect ourselves from litigation; social iatrogenesis in which medical practice sponsors sickness; and structural iatrogenesis wherein we destroy the will of people to deal with their inherent weaknesses. With an average amount of professional chauvinism, protective zeal and a little fairmindedness, I cannot wholly subscribe to the implications in social or structural iatrogenesis, but in clinical iatrogenesis I hear a worthwhile message. Illich is in the forefront of the declamatory rhetoric and we should listen.

According to Illich, iatrogenic disease comprises all clinical conditions for which remedies, physicians and hospitals are the pathogens or the "sickening agents," and we have become thereby "a threat to health." To a degree this is true but every diagnostic and therapeutic procedure has a calculated risk and a potential for harm. Can we say 'nothing ventured nothing gained' without considering many acute disease processes are self-limiting—even benign and that chronic diseases are refractory to most medical interventions? Consider the severe and often fatal reactions that occur with the use of antibiotics for trivial respiratory infections and the wholesome philosophy of the Irish woman who said to John Lister[2], "You know, if only you doctors could find a cure for those horrible antibiotics, you would be doing us all a good turn." But all of the harm does not come from what we do; it can come from what we say or the way we behave in a clinical setting. Along this line Illich points a disapproving finger at the amount of disability from cardiac non-disease in children which is in excess of that due to cardiac disease!

And would you believe non-disease is classified and sub-classified into syndromes and entities.[3] There are many unrecognized non-diseases that are being treated as diseases. The resulting iatrogenic illness does not carry the implication of wrong-doing, but facts are clear with one

study in which medical patients average 11.4 hospital days and iatrogenic disease patients averaged 28.7 days.

The hazards of hospitalization are well known and the diseases of medical progress (more iatrogenesis) are not unknown. David Rogers,[4] President of the Robert Wood Johnson Foundation, said, "the all-inclusive work-up and management practices now commonly employed contribute to the worrisome incidence of iatrogenic disease that has consistently accompanied our advances in medicine." And he adds, "the incidence of avoidable disease of medical progress seems higher than it should be to most who have examined this problem." Illich claims the age of hospital medicine is coming to an end and considering the cost-benefit and risk-benefit ratios, perhaps he has a point.

Not everyone will agree about iatrogenesis nor the impact of its prevalence, but it is, has been, and will be a part of us. Before we initiate the super-diagnostic studies, before we say the wrong thing or say too little or say not enough, before our actions are misinterpreted, before we begin a highly developed therapeutic regimen, let us stop, look, feel, and listen. Primum non nocere—first of all do no harm! JSL

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1. Illich, Ivan. Medical Nemesis, The expropriation of health. Calder and Boyars Ltd., 1975.
2. Lister, John. By London Post. *N. Engl. J. Med.* 292: 467-469, 1975.
3. Meader, C. K. The Art and Science of Non-Disease. *N. Engl. J. Med.* 272: 92, 1965.
4. Rogers, D. E. On Technical Restraint. *Arch. Internal Med.* 135: 1393, 1975.

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SPECIAL ARTICLES

U.K. Medical Students: Where Do They Come From — Where Do They Go

D. Kay Clawson, M.D.*
Lexington, Kentucky

ON August 25, 1975, the University of Kentucky College of Medicine enrolled its 16th class of medical students. As a new Dean, I was interested in learning more about where our students come from, how they are selected and where they go.

Ninety-two per cent of the new students are Kentucky residents. We are very proud of this high percentage of Kentuckians. Recognizing that approximately 20 Kentucky residents are enrolled in medical schools elsewhere in the country each year, we must be very conscious not to close our doors completely to outside residents, lest other states and schools retaliate causing some Kentuckians to lose the opportunity of attending medical school in one of the surrounding states.

The 99 residents who entered were from a pool of 512 Kentucky applicants. Of the 298 applicants from Kentucky's urban areas, 88 were accepted and 66 are enrolling. A number of these students are rural by birth, but have moved to the urban areas, occasionally married, and are pursuing studies in the more urbanized regions. Of 214 rural applicants, we accepted 53 of which 33 have enrolled. The number of rural students enrolling, which reached a high of 44 in 1973, is lower than in previous years, a fact that is of concern to all. The nine out-of-state students were taken from a pool of 1,151.

The admissions process is a long, tedious and agonizing one with the admissions committee and its various subcommittees spending approximately 2,640 person hours discussing applications in committee meetings alone. In the process, 318 students were interviewed by two or more people. Classically, most people dwell on the grade point average or the Medical College Admission Test as key factors for entrance into medical school. No one denies their importance. In reviewing this data for the class entering in 1974, the last year for which this is all available and tabulated, I noted that 22 applicants were accepted with a grade point average of 2.0-2.99, 32 with a grade point of 3.00-3.39, and 65 from 3.40-4.0. The MCAT showed 25 applicants accepted with MCAT scores between 495 and 525, 18 between 526 and 555, 25 between 556 and 585, and 51 above 585 with a number being above 600. (While overall numbers mean little, the average grade point for the University of Kentucky's 1974 entering class was 3.4 and the average MCAT was 567 which compares closely to the 3.5 and 589 figures nationally for that year.)

The admissions process would be markedly eased if these two factors only were used. However, the committee and faculty feel that other factors may be equally or at times more important. Such considerations include (a) how the individual adjusts to demands or pressures of family, school and society, (b) the general intellectual and cultural interest of the individual with particular reference to how he or she relates to his own background, (c) to what degree the applicant has created his or her own opportunities or taken full advantage of opportunities available in developing an interest in and appreciation for a medical career, (d) any relevant medical history including emotional problems or conflicts, and (e) the ability of the applicant to organize and express ideas and opinions under the ordinary stresses of an interview situation.

*Dean, College of Medicine, University of Kentucky, Lexington

Because space and financial constraints make it impossible to afford more students an opportunity to enroll in the College of Medicine, we are continually looking at and revising our admissions procedures, recognizing that many non-admitted students could compete very favorably in medical school and would make excellent physicians, just as those who have been admitted. Although we have recently involved more individuals than just the College of Medicine faculty in the admissions process, it is my goal to increase the involvement of University of Kentucky alumni, interested community practitioners and knowledgeable laymen in the admissions process.

What can be done to increase medical school enrollment? A variety of activities can be looked at including curricular modifications and peripheral site education. In general, however, most suggestions eventually come down to building or renting more space and hiring more faculty. This means money. In evaluating a potential gain, we have elected to put first priority in efforts at increasing the number of first year residency positions in the state. All studies point to the fact that individuals are more likely to settle in the state where they take their residency, rather than in the state of medical school graduation. Currently, we have approximately 70 fewer positions for first-year residents than medical school graduates and hence are having to export our students for further training. Before we can take advantage of significant increases in student body class size, the development of more residency positions should receive top priority for increased funding.

Where do our students go after graduation? At this time, 335 students, not including the class of 1975, are still in the formal residency training. Of these 53.7% are training in primary care specialties, which includes family practice, pediatrics, general internal medicine and obstetrics and gynecology.

Three hundred and ninety of our graduates are currently in practice, with 44.6% practicing in Kentucky. Among the graduates in practice, 51.8% are practicing in primary care areas, a percentage significantly above the national norm. Inasmuch as these individuals went through medical school prior to the great emphasis on primary care or the development of the department of family practice, this speaks well for the University of Kentucky's past efforts.

It is virtually impossible to determine, by any yardstick, what students will end up doing and where they will practice prior to their exposure in medical school. Some interesting figures for the graduating class of 1974 show that the average GPA on entrance was 3.2 and the average MCAT was 551. Eight students went into family practice; of these, the average GPA was 3.35 and the average MCAT was 532. For the graduating class of 1975, the average GPA was 3.21 and the MCAT was 557. Some 26 of these students chose family practice (incidentally, the largest number for any specialty area) and their average GPA was 3.39; average MCAT 549.

The admissions process is far from a science and hence manipulations in it to achieve desired outcomes may or may not produce these outcomes. Until valid predictors are established, we will probably continue to grapple with the problem of how to identify a good doctor. We all know what one is, cannot define one in objective terms, know we are one, and ask, "why aren't there more like us?"

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

Doctor Garrett Adams' article "Update on Ampicillin-Resistant Hemophilus Influenzae" is timely and appropriate, a real service to our readers. A similar special commentary appeared with an eye-catching title, "WARNING —CHLOROAMPHENICOL MAY BE GOOD FOR YOUR HEALTH," in the August issue of the *Archives of Internal Medicine.* Doctor Richard A. Gleckman, the author, states "With the increasing number of reports of strains of H. influenza recovered from the spinal fluid that are resistant to ampicillin, chloroamphenicol will play an even greater role in the therapy of bacterial meningitis." He recognized the reluctance of physicians to use chloromycetin (chloroamphenicol) because of the associated aplastic anemia following an average dose of 7.5 gm of chloroamphenicol is one in 21,671," and "that aplastic anemia has never been reported to follow the use of chloroamphenicol administered alone and exclusively by the parenteral route." And deserving additional emphasis, "Chloroamphenicol must NOT be administered by the intramuscular route, and its ability to retard the biotransformation of tolbutamide, phenytoin sodium, and dicumeral must be kept in mind."

☆ ☆ ☆ ☆ ☆

The article in this issue by D. Kay Clawson, M.D., Dean of our College of Medicine in Lexington, notes that 44.6 per cent of the school's graduates are practicing in Kentucky and that is encouraging since it is a fulfillment of an objective. The Kentucky Medical Foundation was organized in 1953 for the purpose of publicizing the need for better medical education in the State and its number one objective was to provide more physicians for rural Kentucky. The number two objective was to do all things possible to establish a medical school at Lexington. In the 16th year of the school's existence it is encouraging also that 92 per cent of new students are Kentucky residents (33 are from rural areas) and this should provide ultimately for more physicians in neglected areas.

☆ ☆ ☆ ☆ ☆

In the July 1975 *Archives of Internal Medicine,* Michael J. Halberstam, M.D., in an article entitled "Personal Care in an Impersonal Society" had some interesting and amusing comments that are worth repeating here. The subject involved individual rights as well as quackery in medicine. It went like this and I was amused:

"We also have the concept in the United States of individualism, the idea that, within certain limits, people have a right to make damn fools of themselves, even to the extent of endangering lives—their own lives, not the lives of others or their children. It was Menchken who pointed out the positive virtues of quackery in medicine by suggesting that it allowed the mentally less agile to fall into the hands of people who were so incompetent that the patients would not have a chance to reproduce themselves."

Halberstam does not argue that quackery is a positive social good but it caused me to think of Charles Darwin, Natural Selection, and Survival of the Fittest.

☆ ☆ ☆ ☆ ☆

Under a column entitled Talents Aplenty we might list the name of Fred Coy, orthopedic surgeon of Louisville who, according to the *Courier-Journal and Times* for Sunday, 7 September 1975, is the state's leading authority on stone art—a petroglyph expert and archaeologist of repute.



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

Case 9/73 is a 23-ycar-old married, black, Gravida 6, Para 5, with an EDC of November 19, 1973. She had a history of essential hypertension. Blood transfusions were required with her second, third and fourth pregnancies. She was admitted in labor at 2:55 p.m. September 7, 1973; contractions began around 5 a.m. Temperature was 98, pulse 118, respiration 24 and blood pressure 158/110. Fetal heart tone could not be detected. Vaginal examination revealed the cervix 2 cm dilated with a cephalic presentation. Thc patient was highly excited and stated that she had not taken her mcdication for hypertension that day. Fifty mgs of Vistaril was given intramuscularly. Blood pressure at 3:45 was 160/130. 1000 cc of D5W with 10 units of Oxytocin was started at 4:40. Membranes were artificially ruptured at 4:45, the cervix was 3-4 cm dilated, 0 station. A hematologist was asked to see the patient when the fibrinogen level was found to be 0. She was thought to have afibrinogenemia secondary to the dead fetus. He felt that the uterus should be emptied as quickly as possible, to avoid shock. If profuse bleeding occurred or surgery was contemplated, 10 units of cryoprecipitation or 5,000 units of Heparin IV should be given. Her platelets at 6:15 were reported at 183,000 and the prothrombin time was 40 seconds. Hemoglobin was 11.7, hematocrit 34.9. She received 150 mgs of Demerol slowly, IV at 7:05. At 8:30 the cervix was completely dilated, she delivered spontaneously a 2 lb 4-3/4 oz stillborn female without anesthesia or episiotomy. There were no lacerations. The placenta delivered spontaneously. Blood loss was estimated at 200 cc.

At 9 p.m. her blood pressure was 198/150. The fundus was firm. She had a moderate amount of vaginal bleeding. She received Serpasil IM at 9:25, her blood pressure was 170/124. Twenty units of Oxytocin was added to the IV. She continued to have what was described as a moderate amount of vaginal bleeding at 9:45. At 10:15 her pads were saturated with blood, though the fundus remained firm. Her blood pressure was 140/20. At 11:20 blood pressure was not obtainable, pulse was 72, respirations were 48. No urinary output was obtained, pulse was irregular. Her blood pressure was 180/130, pulse was 120. A hemoglobin was 8.3 and hematocrit was 26%. She had 50 mgs of Demerol at 12:55 on September 8, 1975, her blood pressure was 140/120. One unit of packed cells was given. She complained of pain in her abdomen and left side. At 3:30 a.m. her blood pressure was 190/120. Hemoglobin was 10.1 with hematocrit of 30.5%. At 4:20 a.m. a portable chest x-ray was obtained and no abnormalities seen. Hemoglobin was 9.9 gms with hematocrit of 30%. Blood pressure was 150/130, pulse 140, respirations 40. She received another 50 mgs of Demerol IM at 6:20 a.m. She was alert, warm, dry and was not short of breath. She complained of pain in her abdomen. EKG revealed a sinus tachycardia. She had only a small amount of vaginal discharge. A renalogist was consulted since she had been anuric since delivery. Forty mgs of Lasix was ordered IV, Apresoline 10 mgs, Phenergan 25 mgs, and Valium 10 mg and she was digitalized. The diagnosis was acute renal failure secondary to shock and afibrinogenemia, possible renal tubular necrosis or renal cortical necrosis. Coagulation studies were normal. The acute renal failure was to be treated with fluids, dietary restrictions followed by peritoneal hemodialysis if necessary. Her hypertension was treated with Apresoline. Ventilation was adequate at the time and her condition was thought critical.

BUN was 24 and potassium was 5.1 on the 9th of September. The BUN had risen to 44 the 10th and the hemoglobin was 7.9 gms. On the 11th the BUN was 86, the potassium 5.5. The 12th the BUN was 99 and the 13th was 111. She became disoricnted. On the 13th a peritoneal dialysis was started. This maintained her blood chemistries, however, on the 19th of September, she expired suddenly.

The autopsy revealed sections of the kidney with almost complete ischemic destruction of the renal cortices with a thin surviving rim of intermedullary tissue immediately under the capsule. A thin rim of viable tissue was present at the corticomedullary junction. The necrosis extended into the columns of Bertin. The medullary portions of the kidney were spared but in the cortex only a shadow outline of the glomeruli and tubules could be identified.

The cause of death in the 23-year-old postpartum female was bilateral renal cortical necrosis. The necrosis was of the gross form with conspicuous gross and microscopic destruction of the renal corticos with involvement of the columns of Bertin and sparing the medullary portions. Occlusive thrombi were present within the small intrarenal vessels.

Comment

This case was classified as a direct obstetrical death with preventable factors by the Committee on Maternal Mortality. It is felt that this woman had an

(Continued on Page 629)

ORGANIZATION SECTION

KMA House Elects Dr. Parks, Dr. Baird to Top Offices

Paul J. Parks, M.D., Bowling Green, was named KMA President-Elect for the 1975-76 Associational year by the House of Delegates at its September 24 session. Elected as Vice-President was John M. Baird, M.D., Danville.

KMA President David A. Hull, M.D., Lexington, took the oath of office during the President's Luncheon on September 24. He succeeds Hoyt D. Gardner, M.D., Louisville.

An internist, Doctor Parks is the immediate past Chairman of the KMA Board of Trustees and has served as Sixth District Trustee since 1969. His current KMA activities include serving as Chairman of the Committee on National Legislative Activities and as a member of the Scientific Program Committee and the Committee on State Legislative Activities. Doctor Parks is a past president of the Madison County and Warren County medical societies and is active in numerous civic and church activities in his community.

Doctor Baird, a family physician, is Vice-President of the staff at Ephraim McDowell Memorial Hospital in Danville and serves as Medical Director of the McDowell Home Health Agency and the Boyle County Family Planning Clinic. He currently serves on the Scientific Exhibits Committee. A member of both the Kentucky and American Academy of Family Physicians, Doctor Baird is also a member of several civic and church organizations.

Re-elected to two-year terms as Delegates to the AMA were Fred C. Rainey, M.D., Elizabethtown and David B. Stevens, M.D., Lexington. Bennett L. Crowder, II, M.D., Hopkinsville and Thomas L. Heavern, Jr., M.D., Highland Heights, were elected as AMA Alternate Delegates.



Officers for the 1975-76 Associational year are (left to right): John M. Baird, M.D., Danville, Vice-President; Paul J. Parks, M.D., Bowling Green, President-Elect; David A. Hull, M.D., Lexington, President, and S. Randolph Scheen, M.D., Louisville, Secretary-Treasurer.



Doctor Stewart



Doctor Holloway

Drs. Stewart, Holloway Assume KMA Board Leadership

The KMA Board of Trustees, at its first meeting on September 25, chose John P. Stewart, M.D., Frankfort, to serve as Chairman and James B. Holloway, Jr., M.D., Lexington, as Vice-Chairman.

A radiologist, Doctor Stewart succeeds Paul J. Parks, M.D., Bowling Green, as Board Chairman. Doctor Stewart, a member of the Board of Trustees from the Seventh District since 1973, served last year as Chairman of the Committee on State Legislative Activities. A past president of the Franklin County Medical Society, Doctor Stewart is a member of the American College of Radiology and is a former member of the KEMPAC Board of Directors.

Doctor Holloway, Trustee from the Tenth District, was KMA Vice-President in 1972-73 and currently serves as Chairman of the Interspecialty Council and as a member of the Public Relations Committee. He presently is an Associate Clinical Professor of Surgery at the University of Kentucky Medical Center and has been engaged in the private practice of surgery in Lexington since 1964.

Newly-elected members of the Board of Trustees are:

Cecil L. Grumbles, M.D., Louisville, Fifth District
Earl P. Oliver, M.D., Scottsville, Sixth District
Dwight L. Blackburn, M.D., Berea, Eleventh District

Re-elected to three-year terms were: Richard J. Menke, M.D., Covington, Eighth District, and Harold L. Bushey, M.D., Barbourville, Fifteenth District.

Alternate trustees elected or re-elected by the House are: Glenn W. Bryant, M.D., Louisville, Fifth District; L. Martin Wilson, M.D., Bowling Green, Sixth District; Robert C. Smith, M.D., Newport, Eighth District; Robert L. Davis, M.D., Winchester, Eleventh District; and Walter H. Stepchuck, M.D., Harlan, Fifteenth District.

Dr. Asman and Dr. Lancaster Awarded at Luncheon

Henry B. Asman, M.D., Louisville, and L. Y. Lancaster, Ph.D., Bowling Green, were recipients of the 1975 KMA awards. Doctor Asman was presented the Distinguished Service Award and Doctor Lancaster, the Kentucky Medical Association Award at the President's Luncheon, September 24. Richard F. Grise, M.D., Bowling Green, chairman of the Awards Committee, made the presentations.

Honored for outstanding service to the Association and for personal attributes of "integrity and quiet forcefulness," Doctor Asman is a past KMA President, Vice-President, Secretary and member of the Judicial Council. He was the first President of the Kentucky Foundation for Medical Care and has served on innumerable committees of KMA. Currently serving as Associate Editor of *The Journal of KMA,* Doctor Asman has been Director of Medical Services of Blue Shield since 1972.

Doctor Lancaster was selected for his accomplishments as a layman in the health care field. As a professor of 37 years at Western Kentucky University, he became known as the "Father of the Premedical Program." Doctor Lancaster has served on the Rural Kentucky Medical Scholarship Fund and was a former President of the Kentucky Academy of Science.

In addition to the awards presentations, the President's Luncheon featured an address by Theodore Cooper, M.D., Ph.D., Assistant Secretary for Health, HEW. Doctor Cooper, in urging physicians to participate vigorously in dialogue with the federal government on health problems, noted the recent successes of discussions between the Department of HEW and the AMA.



KMA presidents—past, present and future—get together at the close of the Annual Meeting. They are (left to right): Paul J. Parks, M.D., Bowling Green, President-Elect; David A. Hull, M.D., Lexington, President, and Hoyt D. Gardner, M.D., Louisville, Immediate Past President.

Auxiliary Elects New Officers, Makes Name Change

The Auxiliary to KMA installed Mrs. Wally O. Montgomery, Paducah, as President, and elected Mrs. R. Parnell Rollings, Louisville, to the office of President-Elect for the 1975-76 Associational year. Mrs. Montgomery succeeds Mrs. Richard B. McElvein, Lexington, who presided over the Annual Convention held concurrently with the KMA Annual Meeting, September 22-24 in Louisville.

Other newly-elected officers of AKMA for this year included: Mrs. Tom Hall, Bowling Green, 1st Vice-President; Mrs. Kenneth C. Tufts, Lexington, 2nd Vice-President; Mrs. Bennett L. Crowder, II, Hopkinsville, 3rd Vice-President; Mrs. William Keller, Frankfort, 4th Vice-President; Mrs. Charles N. Nicholson, Treasurer; and Mrs. Maurice J. Mueller, Ft. Mitchell, Recording Secretary.

Organizational changes effected during the Convention include: 1) The name of the organization was changed to the **Auxiliary to the Kentucky Medical Association, Inc.** 2) State membership is now open to both husbands and wives of physicians. 3) Junior membership was created for spouses of medical students, interns or residents.

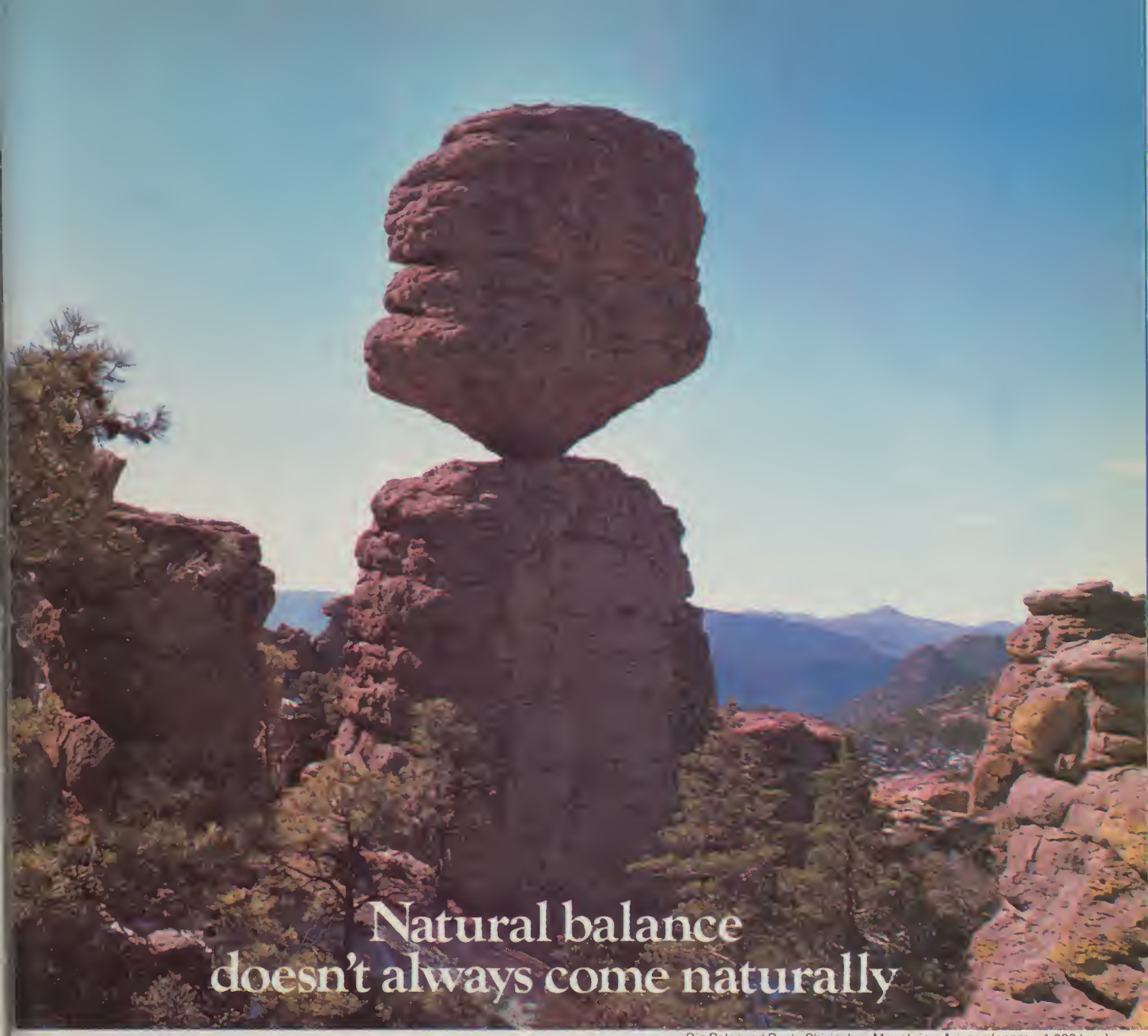
The primary goal of the Auxiliary is to assist KMA in its work for the advancement of health care in Kentucky. There are now 27 organized auxiliaries with a membership of over 1,300, and 108 members-at-large.

The Fall Conference and Board Meeting of AKMA was held on November 11-12 at the McDowell House and Holiday Inn in Danville.

COMPARATIVE REGISTRATION FIGURES

KMA Annual Meetings
Louisville

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
KMA Members	1016	957	1011	1056	1013	1186	940	929	918	1093
Guest Physicians	195	152	153	149	130	149	142	138	116	152
Interns-Residents	121	94	103	95	101	70	119	103	81	74
Medical Students	209	222	185	218	245	233	234	234	150	198
Registered Nurses	33	24	42	27	48	30	41	61	38	46
Exhibitors	312	272	256	305	280	269	241	240	251	253
Guests	126	115	332	339	379	356	364	405	335	405
Technicians — Office Assistants	46	31	29	39	32	36	34	30	31	37
TOTAL ATTENDANCE	2058	1867	2111	2228	2228	2329	2115	2140	1920	2258



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

- Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
- Can relieve nausea and vomiting often associated with vertigo.*
- Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
- Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
- Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

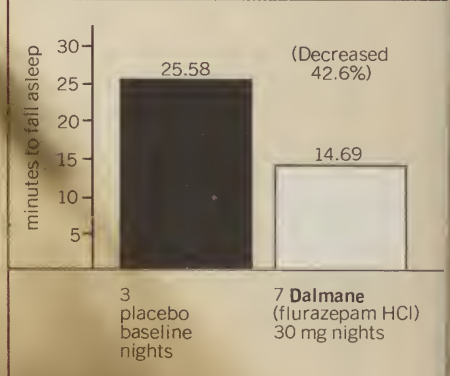


How do you handle trouble falling asleep?

With Dalmane® (flurazepam HCl), results are highly predictable.

As demonstrated below, Dalmane induces sleep within 17 minutes, on average:[1-4]

Average Time Required to Fall Asleep [1-4]
(Four Geographically Separated Sleep Research Laboratory Clinical Studies, 16 Subjects)



And for those with trouble staying asleep or sleeping long enough...

...sleep research laboratory clinical studies prove: Dalmane decreases number of nighttime awakenings and increases total sleep time.[5]

Dalmane (flurazepam HCl) is relatively safe, seldom causes morning "hang-over"

Dalmane is generally well tolerated. The usual adult dose of 30 mg should initially be lowered to 15 mg for the elderly and debilitated, to help preclude oversedation, dizziness or ataxia. Appraisal of possible risks is suggested before prescribing.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th annual Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971
3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
5. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

You can depend on the efficacy of

Dalmane®

(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.



for insomnia

Objectively proved in the sleep research laboratory:

- **sleep within 17 minutes, on average**
- **sleep with fewer nighttime awakenings**
- **sleep for 7 to 8 hours, on average, with a single *h.s.* dose**

ROCHE

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the information is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005



Was Your Delegate Present?

ROLL CALL —

1975 House of Delegates

KMA Annual Meeting

OFFICERS

		First Session	Second Session
Speaker	Carl Cooper, Jr.	Present	Present
Vice-Speaker	Richard B. McElvein	Present	Present
President	Hoyt D. Gardner	Present	Present
President-Elect	David A. Hull	Present	Present
Vice-President	Laszlo Makk	Present	Present
Secretary	S. Randolph Scheen	Present	Present
Treasurer	Keith P. Smith	Present	Present
Delegate to AMA	J. Thomas Giannini	Present	Present
Delegate to AMA	Fred C. Rainey	Present	Present
Delegate to AMA	David B. Stevens	Present	Present
Alternate Delegate to AMA	Charles G. Bryant	Present	Present
Alternate Delegate to AMA	William W. Hall	.....	.....
Alternate Delegate to AMA	Thomas L. Heavern, Jr.	Present	Present
Parliamentarian	Bennett Crowder, II	Present	Present

TRUSTEES

District			
First	W. Eugene Sloan	Present	Present
Second	Charles C. Kissinger	Present	Present
Third	Frank R. Pitzer	Present	Present
Fourth	Charles B. Spalding	Present	Present
Fifth	Edward N. Maxwell	Present	Present
Sixth	Paul J. Parks	Present	Present
Seventh	John P. Stewart	Present	Present
Eighth	Richard J. Menke	Present	Present
Ninth	James J. Ferrell	Present	Present
Tenth	James B. Holloway, Jr.	Present	Present
Eleventh	R. Eugene Bowling	Present	Present
Twelfth	William T. Watkins	Present	Present
Thirteenth	J. Wesley Johnson	Present	Present
Fourteenth	Jerry D. Fraim	Present	Present
Fifteenth	Harold L. Bushey	Present	Present

ALTERNATE TRUSTEES

District			
First	Keith E. Ellis	Present	Present
Second	Kenneth M. Eblen	Present	Present
Third	Henry R. Bell	Present	Present
Fourth	Terrell D. Mays	.....	.....
Fifth	Lloyd G. Yopp	.....	.....
Sixth	Carlisle V. Dodson	Present	.....
Seventh	William H. Keller	.....	Present
Eighth	Robert C. Smith	Present	Present
Ninth	Don R. Stephens	Present	Present
Tenth	Richard F. Hench	Present	Present
Eleventh	Joseph M. Bush	.....	.....
Twelfth	John M. Baird	Present	Present
Thirteenth	Arthur B. Richards	Present	Present
Fourteenth	Harvey A. Page	Present	Present
Fifteenth	Walter H. Stepchuck	Present	Present

PAST PRESIDENTS

Past President	Fred C. Rainey	Present	Present
Past President	Lee C. Hess	Present	Present
Past President	John S. Harter	.....	.....
Past President	John C. Querterinous	.....	.....
Past President	Walter L. Cawood	Present	Present

DELEGATES

First District

BALLARD			
CALLOWAY	C. C. Lowry	Present	.....
CARLISLE			
FULTON			
GRAVES			
HICKMAN	C. J. Mills	.....	.....
LIVINGSTON	Stephen Burkhart	.....	.....
McCRACKEN	Charles H. Bohle	Present	Present
	Jim Embry	Present	Present
	Wally Montgomery	Present	Present
MARSHALL	Keith Ellis	Present	Present

Second District

DAVIESS	James H. Callis	.....	Present
	William E. Pearson	Present	Present
	Glen Richards	Present	Present
HANCOCK	B. Presley Smith, II	.....	.....
HENDERSON	Kenneth Eblen	Present	Present
	John McClellan	Present	Present
McLEAN	W. G. Edds	.....	.....
OHIO	Robert E. Norsworthy	Present	Present
UNION	Wallas N. Bell	Present	Present
WEBSTER			

Third District

CRITTENDEN	Wes Creager	.....	.....
HOPKINS	Wallace R. Alexander	Present	Present
	James Gulley	Present	Present
PENNYRILE MULTI-COUNTY SOCIETY			
CALDWELL	Nathaniel H. Talley	Present	Present
CHRISTIAN	Carl B. Caplinger	Present	.....
	James B. Cox (Alt.)	.....	Present
	David Crowder	Present	Present
LYON	Delmas Clardy (Alt.)	Present	.....
MUHLENBERG	Gary Givens	Present	.....
TODD	Larry Brock	Present	Present
TRIGG	John W. Collins	Present	Present

Fourth District

BRECKINRIDGE	Robert B. Chambliss	.....	.....
BULLITT	J. W. Roney	.....	Present
GRAYSON	Ray A. Cave	Present	Present
GREEN	George C. Cheatham	Present	Present
HARDIN	Thomas Ferriell, Jr.	Present	Present
	Terrell D. Mays	Present	Present
HART	Clem Nichols	Present	Present
LARUE			
MARION	N. D. Widmer	Present	Present
MEADE			
NELSON	Emmett Wood	Present	Present
TAYLOR	Forest F. Shely	Present	Present
WASHINGTON			

Fifth District

JEFFERSON	Robert E. Arnold	Present	Present
	David H. Bizot	Present	Present
	Glenn Bryant (Alt.)	.....	Present
	McHenry S. Brewer	.....	.....
	Peter C. Campbell	Present	Present
	E. Dean Canan	.....	Present
	W. Neville Caudill	Present	Present
	Samuel H. Cheng	.....	Present
	Alvin M. Churney	.....	Present
	James W. Curry	Present	Present
	Charles E. Dobbs	.....	Present
	Rudy J. Ellis	.....	.....
	Michael Flynn	Present	Present
	Darius Ghazi	Present	Present
	Laman A. Gray, Jr.	.....	Present
	Harold D. Haller, Sr.	Present	Present
	R. Brooks Howard	Present	Present
	Lawrence F. Jelsma	.....	Present
	Richard Jelsma	Present	Present
	H. Burl Mack (Alt.)	.....	Present
	Joseph C. Marshall	Present	Present
	Robert L. McClendon	Present	Present
	James P. Moss	Present	Present
	George Nichols, II	Present	.....
	William J. Oliver	.....	Present
	B. Frank Radmacher	Present	Present
	Bernard Rand	.....	.....
	Anne C. D. Richman	Present	Present
	R. Parnell Rollings	Present	Present
	W. Fielding Rubel	.....	.....
	Robert M. Senese	.....	Present
	Charles B. Severs	.....	Present
	Charles C. Smith (Alt.)	Present	Present
	Samuel A. Smith	Present	Present
	David L. Stewart	Present	Present
	Thomas Stigall	Present	Present
	T. Bodley Stites	Present	Present
	Gerald D. Temes	Present	.....
	Walter L. Thompson	.....	Present
	David Townes	.....	Present
	Walter L. Wilson	Present	Present
	Marvin A. Yussman	Present	.....
	Walter Zukof (Alt.)	.....	Present

Sixth District

ADAIR	M. C. Loy	Present	.....
	James C. Salato (Alt.)	.....	Present
ALLEN	Earl P. Oliver	Present	Present
BARREN	Daryl P. Harvey	Present	Present
BUTLER	Richard T. C. Wan	Present	Present
CUMBERLAND	Joseph Schickel	.....	Present
EDMONSON	Sidney E. Farmer	.....	.....
LOGAN	C. V. Dodson	Present	.....
	Lewis Martin (Alt.)	.....	Present
METCALFE	L. P. Emberton	.....	.....
MONROE	Kenneth R. Crabtree	Present	.....
	James R. Head (Alt.)	.....	Present
SIMPSON	J. Michael Pulliam	Present	Present
WARREN	Keith Coverdale	Present	Present
	Nelson B. Rue	Present	Present
	Gerald E. Sullivan	Present	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 22 and 24.

Seventh District

ANDERSON	H. Boyd Caudill	.....	.....
CARROLL	Cecil Martin	Present	Present
FRANKLIN	B. B. Baughman	Present	Present
	O. M. Patrick (Alt.)	Present	Present
	Carl Shroat	.....	.....
GALLATIN	John D. Fielding	Present	.....
GRANT	Roscoe M. Goodman	.....	.....
HENRY	Wyatt Norvell	Present	Present
OLDHAM	Harold Funke	Present	Present
OWEN	O. A. Cull	Present	Present
SHELBY	William Powers	Present	Present
SPENCER	William K. Skaggs	.....	.....
TRIMBLE	Carl Cooper, Jr.	Present	Present

Eighth District

BOONE	Herbert Booth	Present	Present
CAMPBELL-KENTON	Carl Brueggemann	Present	Present
	John Darpell	Present	Present
	Charles D. Eversole	Present	.....
	Howard Herringer, Jr.	Present	.....
	Robert K. Johnson	Present	Present
	Paul Klingenberg (Alt.)	.....	Present
	William Monnig (Alt.)	.....	Present
	Robert E. Smith	Present	Present
	Fred A. Stine	Present	Present

Ninth District

BATH	Robert A. Byron	.....	.....
BOURBON	Harry L. Galloway	Present	Present
BRACKEN	J. M. Stevenson	.....	Present
FLEMING	R. W. Fidler	Present	Present
HARRISON	Don R. Stephens	Present	Present
MASON			
NICHOLAS	Allen J. Hamon	.....	.....
PENDLETON	Robert L. McKenney	Present	Present
ROBERTSON			
SCOTT	Gus. A. Bynum	Present	Present

Tenth District

FAYETTE	H. L. Bailey (Alt.)	Present	Present
	M. Cary Blaydes	Present	Present
	Peter P. Bosomworth	Present	Present
	Walter R. Brewer	Present	Present
	Thomson R. Bryant, Jr	Present	Present
	P. Raphael Caffrey	Present	Present
	D. Kay Clawson (Alt.)	Present	.....
	Colby N. Cowherd	Present	Present
	Melvin L. Dean	Present	Present
	Glenn U. Dorroh	Present	Present
	Richard D. Floyd	Present	Present
	Ward O. Griffen	.....	Present
	Allen E. Grimes, Jr.	Present	Present
	C. Nicholas Kavanaugh	Present	Present
	Carl H. Scott	Present	Present
	John M. Stoeckinger	Present	Present
	John E. Trevey	Present	Present
JESSAMINE	J. Sankey Williams	.....	Present
WOODFORD	Alex J. Alexander	Present	.....

Eleventh District

CLARK	Robert Davis	Present	Present
ESTILL			
JACKSON	Donald L. Peterson	.....	.....
LEE	Arnold L. Taulbee	.....	.....
MADISON	Don E. Cloys	Present	Present
	Linda S. Fagan	Present	Present
MENIFEE			
MONTGOMERY			
OWSLEY	Mildred B. Gabbard	.....	Present
POWELL	Samuel E. Cecil	.....	.....
WOLFE	Paul F. Maddox	.....	.....

Twelfth District

BOYLE	John M. Baird	Present	Present
CASEY	Garnett J. Sweeney	Present	Present
CLINTON	Flovd B. Hay	.....	Present
GARRARD	O. S. Playforth	Present	Present
LINCOLN	Charles C. Crase	Present	Present
McCREARY	John Patton	Present	Present
MERCER	James M. Keightley	.....	.....
PULASKI	J. Roy Biggs	Present	Present
	Danny Clark	.....	Present
ROCKCASTLE	George W. Griffith	.....	.....
RUSSELL	Charles E. Peck	.....	.....
WAYNE	Frank Duncan	.....	.....

Thirteenth District

BOYD	Larry B. Craycraft	Present	Present
	Wiley Kozee	Present	Present
	J. E. Moore	Present	Present
CARTER			
ELLIOTT	Brown L. Adkins	.....	.....
GREENUP	Thomas E. Stevens	Present	Present
LAWRENCE	A. B. Richards	Present	Present
LEWIS			
MORGAN	M. L. Peyton	Present	Present
ROWAN	R. Thomas Fossett	Present	Present

Fourteenth District

BREATHITT	Emanuel C. Turner	.....	.....
FLOYD	W. Grady Stumbo (Alt.)	Present	Present
JOHNSON	Franklin K. Belhasen	Present	Present
KNOTT	Gene T. Watts	.....	Present
LETCHER	James B. Tolliver	Present	.....
MAGOFFIN			
MARTIN	Raymond D. Wells	Present	.....
PERRY	Keith Cameron	.....	.....
PIKE	Harvey Page	Present	Present
	Oscar W. Thompson	Present	Present

Fifteenth District

BELL	Francis A. Forde	Present	Present
	Emanuel Rader	Present	Present
CLAY	William E. Becknell	Present	Present
HARLAN	Phillip J. Begley	Present	Present
	Orides Bonadio	Present	Present
KNOX	Rufino Crisostomo	Present	Present
LAUREL	Ed Lauber	Present	Present
LESLIE	Anne A. Wasson	Present	Present
WHITLEY	R. D. Pitman	Present	Present

Medical Student

	Dan M. Miller	Present	Present

Those Honored . . . .



As his first official duty as KMA President, David A. Hull, M.D., Lexington, (right) presents outgoing President Hoyt D. Gardner, M.D., Louisville, a plaque for his distinguished service to the Association.



Richard F. Grise, M.D., Bowling Green, (center) Awards Committee Chairman, congratulates the 1975 Award recipients after the President's Luncheon, September 24. Henry B. Asman, M.D., Louisville (left) was presented the Distinguished Service Award and L. Y. Lancaster, Ph.D., Bowling Green, (right) received the Kentucky Medical Association Award.

Delegates' Action on 46 Reports and 28 Resolutions Summarized for 1975 KMA Annual Meeting

The House of Delegates of KMA reviewed and took action on a record 46 reports and 28 resolutions submitted to them at this year's KMA Annual Meeting, September 22-25. Reference Committees heard testimony on the reports and resolutions on Monday, September 22 and the House took final action on Wednesday, September 24. Some of the actions taken are as follows:

Professional Liability Insurance

The House of Delegates adopted a resolution outlining 19 basic principles which the members of the House would like to see included in any professional liability insurance law enacted in the state of Kentucky. Among other things, the principles include: limitation on judgement, non-discovery statute and immunity of medical review board personnel and records, elimination of Ad Damnum clause, elimination of Res Ispa Loquitur and a joint underwriting association provision.

In adopting the above-named principles and not settling upon specific language, the House endorsed the judgement of the leadership of KMA and gave them the flexibility of working with the Governor and Legislature to obtain acceptable legislation. The House also pledged its cooperation and availability to the Governor and General Assembly.

The Delegates voted to stand in recess on the liability insurance question, which allows it to be called back into session upon 48 hours call of the Speaker if recommended by the President or 30 members of the House of Delegates or the report of the Legislative Committee that an impasse has been reached. If the House has not been called into Session by no later than the 14th day after the end of the Legislative Session, the House will stand in adjournment.

Dues Assessment and Mandatory Assessment

The House unanimously passed a dues increase of $95, raising current active dues from $130 per year to $225 per year per active member, effective January 1, 1976. The House also unanimously passed an immediate assessment of $50 per member to underwrite the legislative program on professional liability insurance. The assessment carries the same obligation as member dues.

Kentucky Medical Assistance Program

A considerable amount of discussion was held concerning the Kentucky Medical Assistance Program and its inability to obtain appropriate funds to adequately cover physician services. The House rejected a resolution calling for KMA members to withdraw from the program but did accept a resolution introduced by the KMA Board of Trustees to request the Governor and state Legislators to allocate sufficient funds for physician services in the Medical Assistance Program. Such funds would be utilized to bring reimbursement to an equitable level to insure the maintenance of an adequate number of physicians, to offset the factors of noncompetitive reimbursement levels in poor and underserved areas and to prevent further depletion of medical availability.

Also adopted was a resolution introduced by the Jefferson County Medical Society calling upon the KMA Board of Trustees and Officers to determine, as accurately as possible, in cooperation with the Kentucky Medical Assistance Program, Bureau for Social Insurance, the total value of services contributed by Kentucky physicians on behalf of the people of the Commonwealth, so that all members of the written and electronic media may become accurately informed.

Medicare Program

Much attention was directed to the Medicare Program and a resolution was adopted calling for KMA to communicate its dissatisfaction with Medicare to the American Medical Association and ask that they in turn contact the Secretary of HEW, the Director of the Social Security Administration Bureau of Health Insurance, and the U. S. Congress to ask that Medicare patients be assisted by: asking that patients be correctly informed as to exactly what amount of their care is reimbursible by Medicare; advising patients of a doctor who does not accept assignment through the program that the patient is responsible for the full balance of the doctor's usual, customary and reasonable fee and not for only the applicable deductible co-insurance for non-covered service; determining reimbursement levels on a usual, customary and reasonable basis rather than the method currently used.

This is a very brief summary of some of the actions taken during the 1975 Annual Meeting. All of the reports and resolutions acted upon by the KMA House of Delegates will be published in the December issue of *The Journal.*



Reference Committee chairmen report on the recommendations made by their committees on 46 reports and 28 resolutions to the House of Delegates at its final session on Wednesday, September 24.

Delegates Choose 5 Members For 1976 Nominating Committee

Five physicians were elected to serve on the 1976 Nominating Committee by action of the KMA House of Delegates at its final annual session, September 24.

Committee members are: Leslie W. Blakey, M.D., Lexington, Chairman; Max P. Jones, M.D., Pikeville; William E. Pearson, M.D., Owensboro; Lewis E. Wesley, M.D., Liberty; and J. Sankey Williams, M.D., Nicholasville.

The Committee is responsible for presenting a slate of candidates for all elective offices within the structure of the Kentucky Medical Association to the House of Delegates at the 1976 Annual Meeting.

Maternal Mortality

(Continued from Page 618)

abruption of the placenta and was not properly treated for blood loss and the resultant shock. It is not known when the fetus died. Although this might have been a dead fetus syndrome rather than an abruptio placenta. If the fetus had been dead for a prolonged time, perhaps the uterus should have been emptied earlier than it was. This entity was beautifully described in the series of papers by Reid and coworkers, in the *American Journal of Obstetrics and Gynecology,* Volume 66, pgs. 465-539, 1953. It is to be stated again that this woman should have had permanent sterilization or have been practicing a method of conception control. This was her sixth pregnancy and with the diagnosis of essential hypertension, she was prone to such complications as documented here.

NEWS NOTE

Mabel Ann Veech, Louisville, was recently elected as a trustee of the American Association of Medical Assistants. Mrs. Veech, who is employed by Jack Hellmann, M.D., Louisville, has served as president, vice-president and parliamentarian of both the state and local chapters of AAMA.

December Journal

To Feature

Complete Proceedings

of

1975 House of Delegates

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There's something special about children vomiting

The risk of dehydration . . . plus the psychological stress on both mother and child . . . greatly increases the urgency in controlling vomiting in children. In addition, there is, of course, need to avoid the extrapyramidal problems associated with phenothiazine medications.



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WANS® CHILDREN SUPPRETTES™ are specially formulated to stop vomiting and nausea in children—rapidly and with minimal complications.

- WANS are administered rectally—often the best route in the vomiting patient.
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And for children over 12 years of age and adults suffering from nausea and vomiting, consider higher-strength WANS® No. 1 or WANS® No. 2.

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pyrilamine maleate 25 mg; sodium pentobarbital 30 mg
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*Based on usage by dosage form; data gathered by independent research organization.

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*WARNING: may be habit forming.

CONTRAINDICATIONS: Infants under 6 months. Acute intermittent porphyria, known hypersensitivity to barbiturates or antihistamines, known previous barbiturate addiction, severe hepatic impairment, CNS injury, senility, and presence of uncontrolled pain.

WARNINGS: Barbiturates may be habit forming. Pre-existing psychologic disturbances may be aggravated. Idiosyncratic reactions may occur. Acquired sensitivity may result in allergic reactions. Safety in pregnancy has not been established.

PRECAUTIONS: Use cautiously with other sedative, hypnotic or narcotic agents. Use with caution in patients with acute or chronic hepatic disease, fever, hyperthyroidism, diabetes mellitus, severe anemia, congestive heart failure, or a history of drug dependence or suicidal tendencies. May impair alertness and coordination with increased accident risk.

ADVERSE REACTIONS: Drowsiness, fatigue, vertigo, incoordination, tremor, muscle weakness, ataxia, hypotension, respiratory depression, delirium and coma. Dryness of nose, mouth, and throat, pupillary dilatation or blurred vision, urinary retention, abdominal pain, nausea, vomiting, diarrhea, and hypersensitivity reactions. Overdose may result in hallucinations, excitement, ataxia, incoordination, athetosis, convulsions, and death.

DOSAGE AND ADMINISTRATION: Rectally, children 2-12 years of age, one WANS® CHILDREN every 6-8 hours as required. Children under 2 years of age may receive ½ the above dosage. *Adults:* Rectally, one WANS® No.1 Supprette™ to inhibit mild nausea and/or vomiting; one WANS® No. 2 Supprette to control pernicious vomiting. Repeat doses for adults should be 4 to 6 hours apart, not to exceed four doses in 24 hours. Moisten finger and Supprette with water before inserting. Optimum dosage must be determined in each case by the clinical response.

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	Medix Bldg. — Adj. S.S. Mary & Elizabeth Hosp.
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Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed: "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."*

If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you can get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.



Fire fighter for arthritic flare-ups.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

Ragan, C.: The Clinical Picture of Rheumatoid Arthritis, in Arthritis, ed. 8, edited by J. L. Hollander and D. J. McCarty, Jr., Philadelphia, Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications: Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.

Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement.

(B)98-146-070-J (10/71)

For complete details, including dosage, please see full prescribing information.

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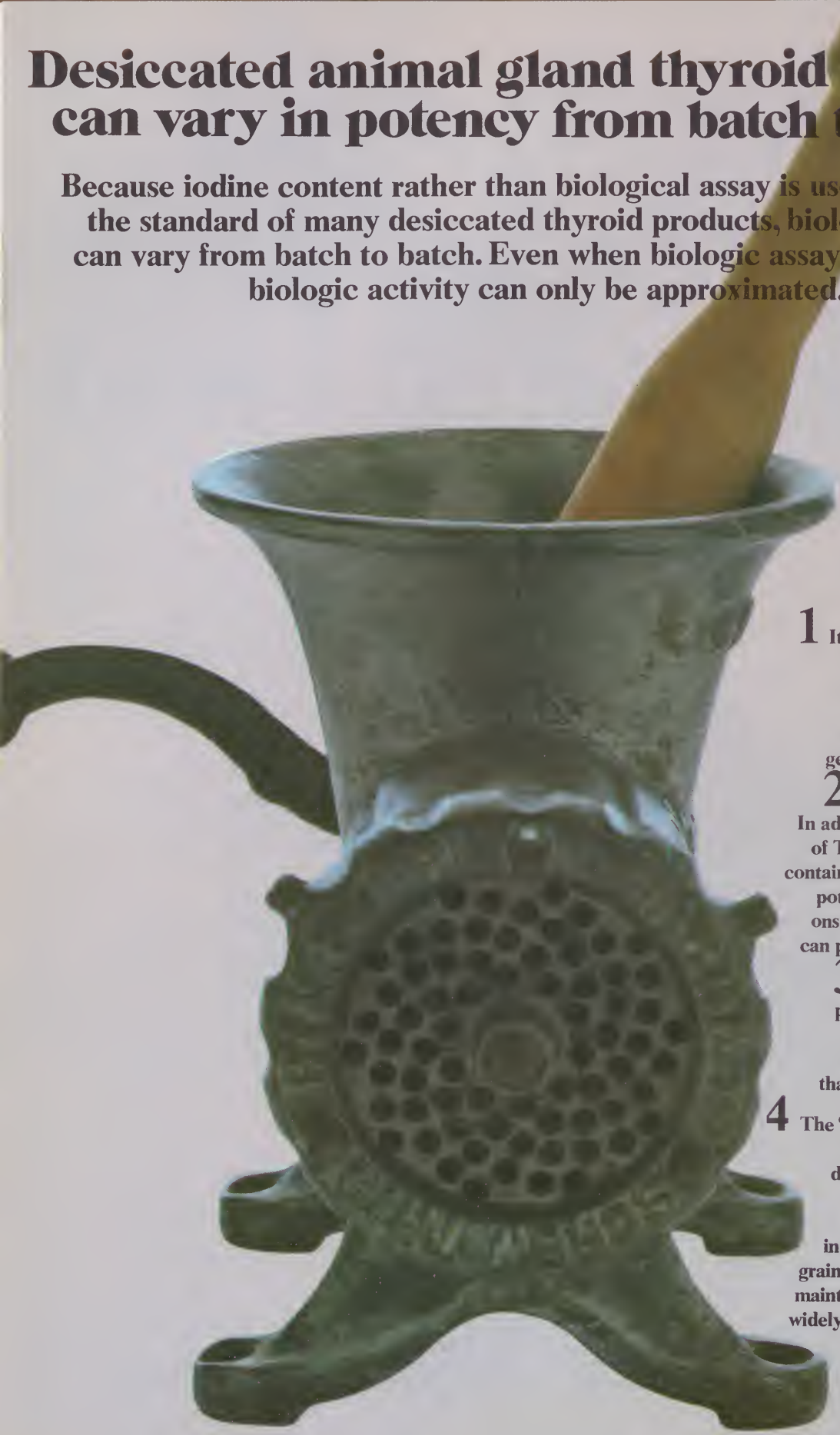
Synthroid®
(sodium levothyroxine, U.S.P.) FLINT
or
desiccated thyroid



consider the differences...

Desiccated animal gland thyroid products can vary in potency from batch to batch.

Because iodine content rather than biological assay is used to measure the standard of many desiccated thyroid products, biologic activity can vary from batch to batch. Even when biologic assay is employed, biologic activity can only be approximated.



1 It is recognized that T_4 and T_3 content in desiccated thyroid and thyroglobulin varies from animal to animal, by animal species, geography, and animal diet.

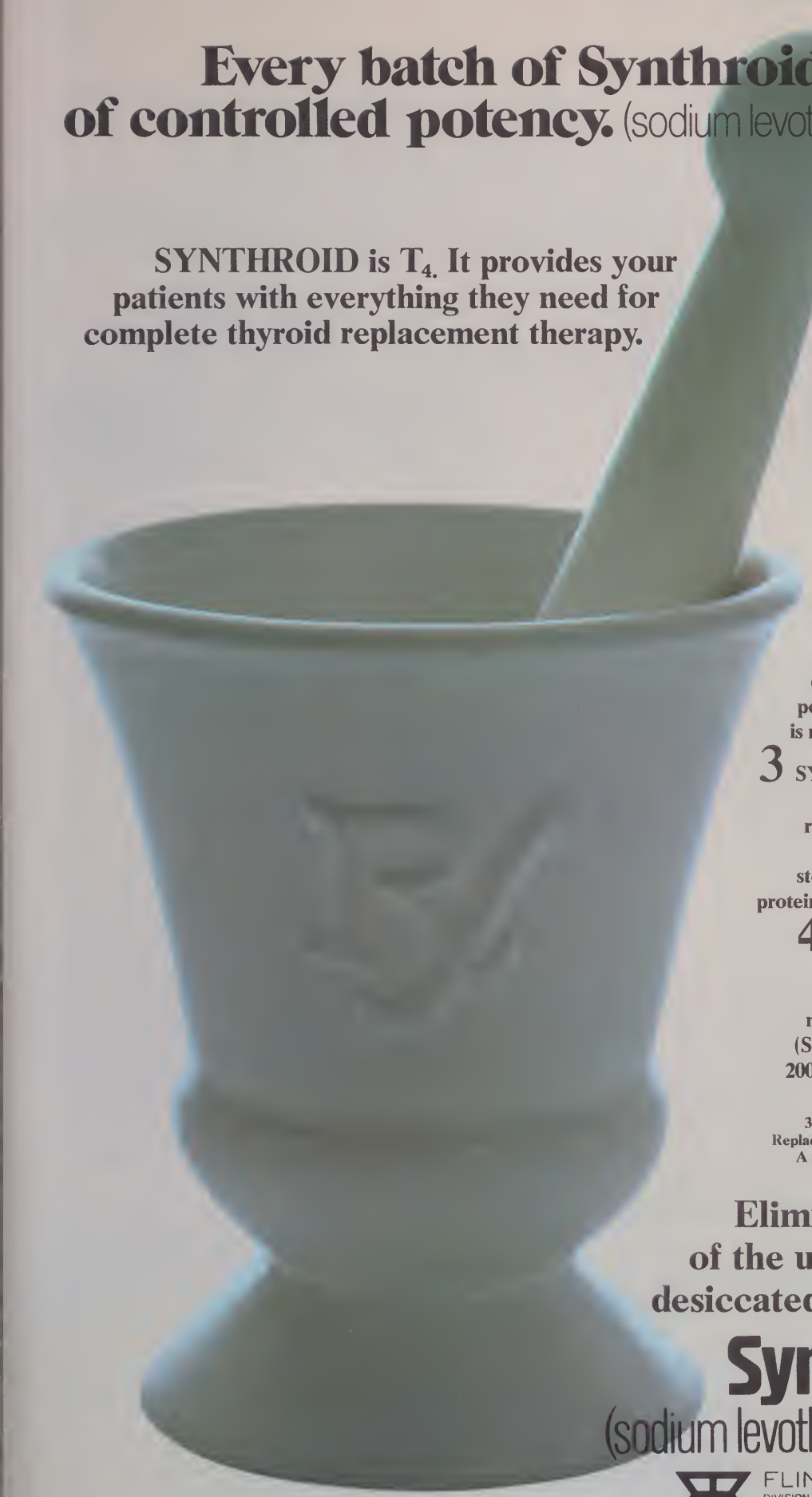
2 Of therapeutic concern: In addition to varying amounts of T_4, desiccated thyroid may contain varying amounts of T_3, a potent compound with rapid onset and fleeting action that can produce metabolic surges.

3 Even when kept under proper storage conditions, desiccated thyroid deteriorates more rapidly than the synthetic hormone.

4 The "usual maintenance dose" for the widely prescribed desiccated thyroid is "from 1 grain to 3 grains per day, but it may vary, in individual patients from 1/2 grain to 10 grains."[1] The "usual maintenance dose" of the most widely prescribed thyroglobulin (which is also a desiccated thyroid product) is "0.5 to 3.0 grains daily."[2]

1. Armour Thyroid (Tablets). 1975 Physicians' Desk Reference. p. 561.
2. Proloid® (thyroglobulin). 1975 Physicians' Desk Reference. p. 1575.

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SYNTHROID is T_4. It provides your patients with everything they need for complete thyroid replacement therapy.

1 Sodium levothyroxine is *not derived* from any animal gland source. It is a synthetic and, since sodium levothyroxine is the only active ingredient, its weight is the sole determinate of potency.

2 SYNTHROID (sodium levothyroxine) is T_4 which is converted by the patient to T_3 at the cellular level, thereby providing a physiologic source and amount of T_3 to meet metabolic needs for complete thyroid replacement therapy. Because the onset of effect is slower and more steady, the possibility of sudden metabolic surges is reduced with SYNTHROID therapy.

3 SYNTHROID (sodium levothyroxine) products have a longer and more reliable shelf life than Thyroid U.S.P. when kept under the same proper storage conditions. There is no animal protein present in SYNTHROID products.

4 A recent study of 44 patients with hypothyroidism indicates that 89 percent of the patients were maintained with doses of L-thyroxine (SYNTHROID) between 100 mcg. and 200 mcg. (0.1 mg. and 0.2 mg.) per day.[3]

3. Stock, J.M., Surks, M.I., and Oppenheimer, J.H.: Replacement dosage of L-thyroxine in hypothyroidism. A re-evaluation. New Engl. J. Med. *290*:529-33, 1974.

Eliminates many of the uncertainties of desiccated thyroid therapy.

Synthroid®

(sodium levothyroxine, U.S.P.) FLINT

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See reverse side for full prescribing information.

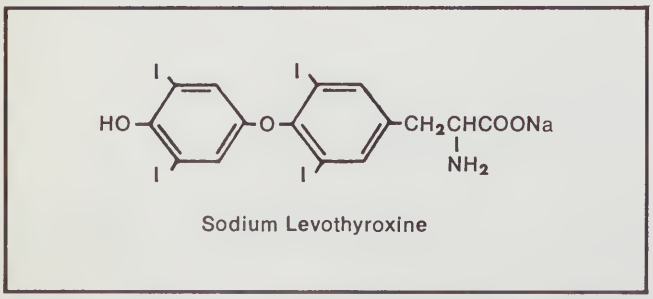
Synthroid®
(sodium levothyroxine, U.S.P.*) FLINT

Synthroid Tablets—for oral administration
Synthroid for Injection—for parenteral administration



Description

SYNTHROID (sodium levothyroxine) **Tablets** and SYNTHROID **Injection** contain synthetic crystalline sodium levothyroxine (L-thyroxine). L-thyroxine is the principal hormone secreted by the normal thyroid gland.



Sodium Levothyroxine

Actions

SYNTHROID (sodium levothyroxine) **Tablets**, taken orally, provide hormone that is readily absorbed from the gastrointestinal tract. SYNTHROID **Injection** is effective by any parenteral route. Following absorption, the synthetic L-thyroxine provided by SYNTHROID products cannot be distinguished from L-thyroxine that is endogenously secreted. Each is bound to the same serum proteins and each exhibits a six to seven day circulating half-life in the euthyroid individual.

Both SYNTHROID products will provide L-thyroxine as a substrate for physiologic deiodination to L-triiodothyronine. Therefore, patients taking SYNTHROID products will demonstrate normal blood levels of L-triiodothyronine even when the thyroid gland has been surgically removed or destroyed by radioiodine. Administration of levothyroxine alone will result in complete physiologic thyroid replacement.

Indications

SYNTHROID (sodium levothyroxine) products serve as specific replacement therapy for reduced or absent thyroid function of any etiology. SYNTHROID **Injection** can be used intravenously whenever a rapid onset of effect is critical, and either intravenously or intramuscularly in hypothyroid patients whenever the oral route is precluded for long periods of time.

Contraindications

There are no absolute contraindications to SYNTHROID (sodium levothyroxine) therapy. Relative contraindications include acute myocardial infarction, uncorrected adrenal insufficiency and thyrotoxicosis. (See WARNINGS)

Warnings

Patients with cardiovascular diseases warrant particularly close attention during the restoration of normal thyroid function by any thyroid drug. In such cases, low initial dosage increased slowly by small increments is indicated. Occasionally, the cardiovascular capacity of the patient is so compromised that the metabolic demands of the normal thyroid state cannot be met. Clinical judgment will then dictate either a less-than-complete restoration of thyroid status or reduction in thyroid dosage.

Endocrine disorders such as diabetes mellitus, adrenal insufficiency (Addison's disease), hypopituitarism and diabetes insipidus are characterized by signs and symptoms which may be diminished in severity or obscured by hypothyroidism. SYNTHROID (sodium levothyroxine) therapy for such patients may aggravate the intensity of previously obscured symptoms and require appropriate adjustment of therapeutic measures directed at these concomitant disorders.

Thyroid replacement may potentiate the effects of anticoagulants. Patients on anticoagulant therapy should have frequent prothrombin determinations when instituting thyroid replacement to gauge the need to reduce anticoagulant dosage.

Precautions

Overdosage with any thyroid drug may produce the signs and symptoms of thyrotoxicosis, but resistance to such factitious thyrotoxicosis is the general rule. With SYNTHROID (sodium levothyroxine) **Tablets**, the relatively slow onset of action minimizes the risk of overdose but close observation in the weeks following institution of a dosage regimen is advised. Treatment of thyroid hyperactivity induced by oral medication is confined to interruption of therapy for a week, followed by reinstitution of daily therapy at an appropriately reduced dosage.

Adverse reactions

Adverse reactions are due to overdose and are those of induced hyperthyroidism.

Dosage and administration

For most adults, a final dosage of 100 mcg (0.1 mg) to 200 mcg (0.2 mg) of SYNTHROID (sodium levothyroxine) **Tablets** daily will restore normal thyroid function and only occasionally will patients require larger doses. Failure to respond adequately to a daily oral intake of 400 mcg (0.4 mg) or more is rare and should prompt reconsideration of the diagnosis of hypothyroidism, special investigation of the patient in terms of malabsorption of L-thyroxine from the gastrointestinal tract or poor adherence to therapy.

The concomitant appearance of other diseases, especially cardiovascular diseases, usually dictates a replacement regimen with initial doses smaller than 100 mcg/day (0.1 mg).

In otherwise healthy adults with relatively recent onset of hypothyroidism, full replacement dose of 150 mcg (0.15 mg) or 200 mcg (0.2 mg) has been instituted immediately without untoward effect and with good therapeutic response. General experience, however, favors a more cautious approach in view of the possible presence of subclinical disorders of the cardiovascular system or endocrinopathies.

The age and general physical condition of the patient as well as the severity and duration of hypothyroid symptoms determine the starting dosage and the rate of incremental dosage increase leading to a final maintenance dosage. In the elderly patient with long standing disease, evidence of myxedematous infiltration and symptomatic, functional or electrocardiographic evidence of cardiovascular dysfunction, the starting dose may be as little as 25 mcg (0.025 mg) per day. Further incremental increases of 25 mcg (0.025 mg) per day may be instituted at three to four week intervals depending on patient response. Conversely, otherwise healthy adults may be started at higher daily dosage and raised to the full replacement dosage in two to three weeks. Clearly it is the physician's judgment of the severity of the disease and close observation of patient response which determines the rate of dosage titration.

Laboratory tests to monitor thyroid replacement therapy are of limited value. Although measurement of normal blood levels of thyroxine in patients on replacement regimens frequently coincides with the clinical impression of normal thyroid status, higher than normal levels on oral replacement of levothyroxine occasionally occurs and should not be considered evidence of overdosage per se.

In all cases, clinical impression of the well-being of the patient takes precedence over laboratory determination in determining the appropriate individual dosage.

In infants and children, there is a great urgency to achieve full thyroid replacement because of the critical importance of thyroid hormone in sustaining growth and maturation. Despite the smaller body size, the dosage needed to sustain a full rate of growth, development and general thriving is higher in the child than in the adult, as much as 300 mcg (0.3 mg) to 400 mcg (0.4 mg) per day.

In myxedema coma or stupor, without concomitant severe heart disease, 200 to 500 mcg of SYNTHROID **Injection** may be administered intravenously as a solution containing 100 mcg/ml. Although the patient may show evidence of increased responsivity within six to eight hours, full therapeutic effect may not be evident until the following day. An additional 100 to 300 mcg or more may be given on the second day if evidence of significant and progressive improvement has not occurred. Like the oral dosage form, SYNTHROID **Injection** produces a predictable increase in the circulating level of hormone with a long half-time. This usually precludes the need for multiple injections but continued daily administration of lesser amounts intravenously should be maintained until the patient is fully capable of accepting a daily oral dose.

In the presence of concomitant heart disease, the sudden administration of such large doses of L-thyroxine intravenously is clearly not without its cardiovascular risks. Under such circumstances, intravenous therapy should not be undertaken without weighing the alternative risks of the myxedema coma and the cardiovascular disease. Clinical judgment in this situation may dictate smaller intravenous doses of levothyroxine.

SYNTHROID **Injection** by intravenous or intramuscular routes can be substituted for the oral dosage form when ingestion of SYNTHROID **Tablets** is precluded for long periods of time.

How supplied

SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in 6 concentrations: 25 mcg (0.025 mg)—orange . . . 50 mcg (0.05 mg)—white . . . 100 mcg (0.1 mg)—yellow . . . 150 mcg (0.15 mg)—violet . . . 200 mcg (0.2 mg)—pink . . . 300 mcg (0.3 mg)—green. Depending on strength, these tablets are available in bottles of 100, 500, 1000 and 5000.

SYNTHROID (sodium levothyroxine) for **Injection** is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, U.S.P. A separate 5 ml vial containing Sodium Chloride Injection, U.S.P. is provided as a diluent.

Directions for reconstitution

Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml of the Sodium Chloride Injection, U.S.P. to the vial. Shake vial to insure complete mixing. **Use immediately** after reconstitution. Discard any unused portion.

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LIBRIUM®
(chlordiazepoxide HCl)

FOR ALL THE RIGHT REASONS.

- prompt and specific action
- documented benefit-to-risk ratio
- three dosage strengths to meet most therapeutic needs



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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chlordiazepoxide HCl/Roche
5mg, 10mg, 25mg capsules

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LIBRIUM®
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FOR ALL THE RIGHT REASONS.

Yesterday's decision to use Librium for a clinically anxious patient was based on several good reasons. Safety. Effectiveness. Versatility. And the reasons you chose it yesterday are as valid today.

Librium has accumulated an unsurpassed clinical record. A record validated in several thousand papers published both here and abroad.

Librium, when used in proper dosage, rarely interferes with a patient's mental acuity or ability to perform. However, as with all CNS-acting agents, good medical practice suggests that patients be cautioned against hazardous activities requiring complete mental alertness.

Librium has an established safety record and a documented benefit-to-risk ratio. And Librium is used concomitantly with such drugs as cardiac glycosides, diuretics, anticholinergics and antacids.

So when you consider antianxiety therapy, consider Librium. It's a good choice. For today. And tomorrow.



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Season's Greetings

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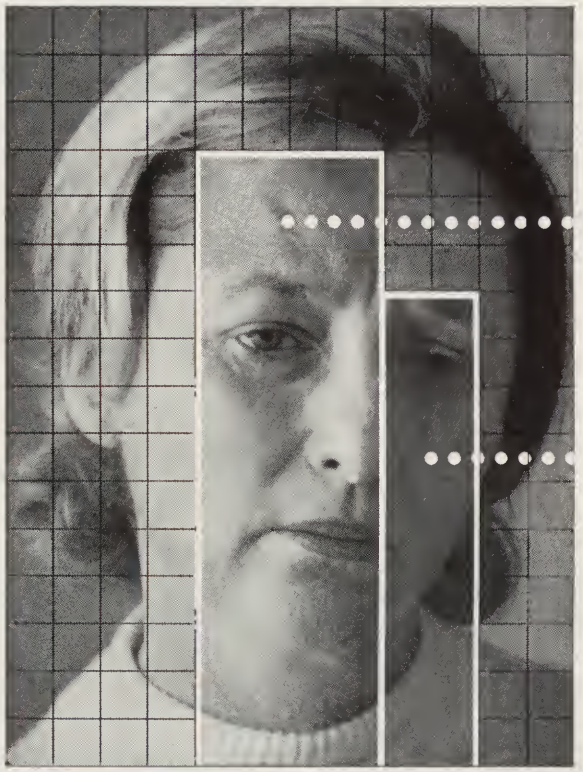
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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium®
(diazepam) Ⓡ IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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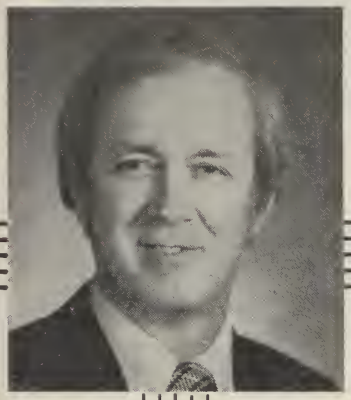
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MESSAGE FROM THE PRESIDENT



Consumerism

IT was my pleasure recently to attend one of the public forums held by the President's Domestic Council on issues related to national domestic policy. I came away with the impression more firmly impressed on my mind that the public is demanding more and more involvement and control over the delivery of Health Care. At a meeting such as this, it is obvious that physicians are in a minority role, even though collectively as a group we may think of ourselves as being able to control our own destiny.

Throughout this meeting and through the past few years that I have been associated with organized medicine, I have come to realize that the word "consumerism" is the dominant theme throughout all Health Care matters. Whether we as physicians agree with this concept or not, the public seems to be demanding a voice in the control of Health Care Delivery. And, as much as we violently protest someone else telling the medical profession how it should perform, public concern seems to be dictating their involvement.

It seems to me that rather than taking an obstructionist attitude toward the consumer involvement that we must work within the confines of this new public policy. This would entail the involvement of each of us on governmental committees, councils and commissions when asked to serve. We should be extremely careful as to whom we ask to speak for us on these bodies, as they will be organized medicine's voice in the "outside world". I point to physician involvement in Comprehensive Health Care programs throughout the state as an example where our leadership shall lie. Involvement at the national and state level in these programs, even though offensive to most of us, is, in my opinion, one of the most effective ways to exercise leadership in the field of Health Care Delivery. We should continue, however, to make our views known to the elected officials and the strongest voice is a unified one.

David A. Hull

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

DECEMBER

19-20 "Rheumatic Disease: Management Options,"*, University of Kentucky Medical Center, Lexington

JANUARY

15 KEMPAC/AMPAC Political Workshop, Ramada Inn, Bluegrass Convention Center, Louisville

28 "Optimal Use of Blood Products," **Health Sciences Center, University of Louisville, Louisville

FEBRUARY

22-28 Sixth Family Medicine Review, Session III,* Registration fee: $245. University of Kentucky Medical Center, Lexington

25 "Pre- and Postoperative Pulmonary Problems,"** Health Sciences Center, University of Louisville School of Medicine, Louisville

MARCH

18 "Medical-Surgical Complications in Diabetes,"** Health Sciences Center, University of Louisville School of Medicine, Louisville

24 "Management of Gastrointestinal Bleeding,"** Suburban Hospital, Louisville

31-April 1 22nd Symposium on Cardiovascular Diseases, Heart Association of Louisville and Jefferson County, Health Sciences Center, Louisville

IN SURROUNDING STATES

JANUARY

14-15 "Surgical Technics, 'How I Do It,' " Cleveland Clinic Educational Foundation, Cleveland

23-25 AMA National Leadership Conference, Chicago Marriott Motor Hotel, Chicago

28-
Feb. 1 American College of Psychiatrists, del Coronado Hotel, Coronado, Calif.

30-
Feb. 1 AMA Congress on Medical Education, Palmer House, Chicago

31-
Feb. 4 American Academy of Orthopedic Surgeons, Marriott-Rivergate, New Orleans

MARCH

19-20 "Colonoscopy Techniques and Application," Cleveland Clinic Educational Foundation, Cleveland

For further information, contact: Frank R. Lemon, M.D., Associate Dean of Extra-Mural Affairs, UK College of Medicine, Lexington 40506

**For further information, contact: Gerald D. Swim, Director, Office of Continuing Education, UL School of Medicine, Louisville 40202*

SEND IN MEETING INFORMATION

Many medical organizations are setting dates for their spring and summer meetings. At the same time they are choosing the topics to be discussed, arranging for speakers and planning programs.

The Continuing Medical Education office of the Kentucky Medical Association would like to urge these societies and organizations to notify this office of these dates and topics so they can be added to the "Continuing Education Opportunities" calendar in *The Journal*. In this way conflicts in dates can be avoided and a wider audience can be informed of these upcoming meetings.

Please send such information, when available, to the KMA Continuing Medical Education Office, 3532 Ephraim McDowell Drive, Louisville, Ky. 40205.

MARK YOUR CALENDAR

1976

June 2-3, Emergency Health Care Seminar, Executive West, Louisville

June 26-July 1, AMA Annual Convention, Dallas

September 27-30, KMA Annual Meeting, Ramada Inn, Bluegrass Convention Center, Louisville

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american college of chest physicians

In Memoriam

Deceased Kentucky Physicians
1975

William H. Allen, Louisville

Samuel G. Bell, Murray

*Clinton C. Cook, Louisville

Arthur L. Cooper, Somerset

Josiah H. Cornell, Covington

Paul E. Corum, Midway

Harold L. Dahl, Covington

Robert J. Ertel, Covington

Edward J. Fadell, Louisville

Virgil C. Gillispie, Wilmore

Raymond C. Haley, Pikeville

Russell L. Hall, Prestonsburg

Bascom T. Harris, Lexington

Harry G. Herring, Lexington

Pat Ryan Imes, Louisville

*Alvin Lebendiger, Louisville

Antonio U. Lira, Covington

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Aura J. Miller, Louisville

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*John S. Oldham, Owensboro

William H. Parker, Owensboro

*Leland E. Payton, Lynch

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*John H. Rompf, Lexington

Richard H. Russell, Louisville

*Ludwig H. Segerberg, Louisville

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Herman B. Strull, Louisville

James H. Turner, Hopkinsville

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List of names of deceased physicians available to The Journal as of November 11, 1975.
**Died November-December, 1974*

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Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

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This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and that the full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude, muscle weakness, mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; jaundice; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

For more detailed information, consult your MSD Representative or see full Prescribing Information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486.

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ANSWERS TO YOUR QUESTIONS ABOUT BLUE SHIELD

Recent studies by Blue Shield of Kentucky indicate a high volume of Blue Shield claims are being rejected or returned for incomplete information. By identifying some specific reasons why these claims are rejected or returned, we hope to reduce your administrative cost and ours.

Q. What information is most frequently omitted from or reported incorrectly on the Blue Shield Claim Form?

A. *1. Incorrect certificate number* *(Item 1)*
2. Description of service rendered *(Item 24 and 43)*
3. Date of service not included *(Item 17)*
4. Size and location of lesion not given *(Item 25)*

Q. How can a physician's medical assistant identify the type of coverage a member has?

A. *a) By utilizing the outpatient diagnostic x-ray and laboratory code sheet in order to determine if claims should be filed. (This will be supplied on request.)*
b) By utilizing the Blue Shield Manual in identifying what type coverage the patient has. Example: Blue Shield members with coverage codes (1504), (1510), (4260) and (4460) do not have coverage for non-accident outpatient x-rays, outpatient diagnostic laboratory services and medical (non-surgical) treatment, or first aid.

Q. What non-covered services are most frequently filed to Blue Shield of Kentucky?

A. *1.* **Office Visits**—*Office visits are not covered services under basic Blue Shield.*
2. **First Aid and Medical Emergencies**—*If a subscriber has coverage, this can be determined by checking coverage codes on the subscriber's I.D. Card with the outpatient first aid and medical emergency code list. Most subscribers do not have Medical Emergency coverage.*
3. **Diagnostic X-ray and Laboratory**—*These services should not be filed unless the subscriber has coverage. The coverage can be determined by checking your outpatient diagnostic X-ray and laboratory code sheet.*

Q. Why does Blue Shield of Kentucky return claims for additional information if it is not covered anyway?

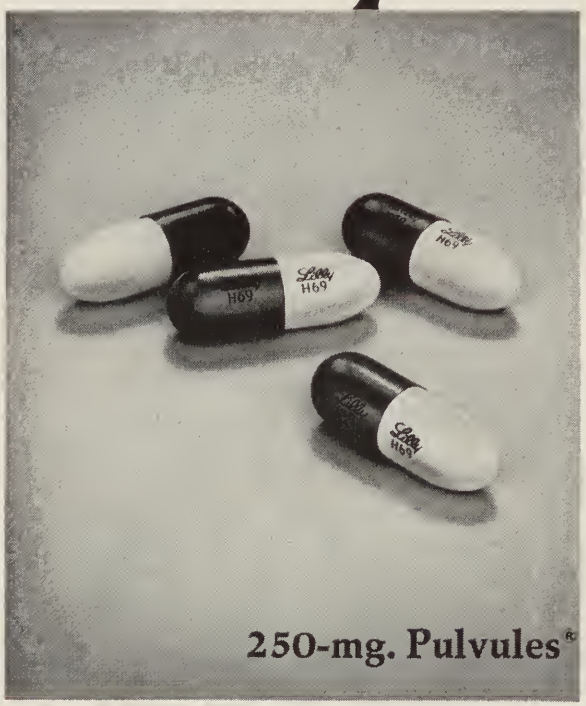
A. *If a claim is filed without necessary information to process, we are no longer returning the claim for complete information unless it is a covered service.*

Q. When your patient insists that you file a Blue Shield of Kentucky claim what can you do to show him he does not have coverage for the service performed?

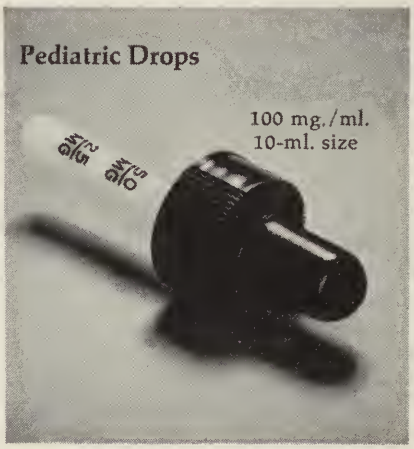
A. *Physicians' offices have been provided with a blue card showing some coverage codes that do not cover diagnostic X-ray and lab, first aid, medical (non-surgical treatment) and non-accident X-rays. We also have lists of all coverage codes that do cover diagnostic X-ray and laboratory services.*

Should you have any questions regarding this information or other subjects related to Blue Shield of Kentucky, Professional Relations Representatives are available to assist and will visit your office upon request. Please contact the Blue Cross and Blue Shield office nearest you.

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VOLUME 73 DECEMBER 1975 NUMBER 12

The Changing Bacteriologic Pattern of Newborn Septicemia*

JOHN FARQUHAR, JR., M.D., and BILLY F. ANDREWS, M.D.
Louisville, Kentucky

This study confirms the frequent occurrence of Group B streptococcal sepsis in the newborn in Kentucky and Indiana. Emphasis is placed on the recognition and treatment of the "early-onset" form of the infection.

SEVERAL recent reviews of neonatal sepsis have been published,[1-3] including an eight-year survey of patients from one of the hospitals of our medical center.[4] In the past few years, attention has been turned increasingly to the emergence of Group B beta-hemolytic streptococcal infections as a frequent and serious occurrence.[3] Reports from perinatal centers throughout the country have dramatically documented the rise in this organism's rate of isolation from septic infants.[6-13]

It is not our purpose to repeat these excellent studies; we urge their careful review by all physicians caring for newborn infants. Rather, we wish to accomplish two goals: to document the shift in bacteriologic pattern at our referral center; and to stress the importance of early recognition and therapy for infants suspected of having group B streptococcal disease.

*From the Division of Neonatology, Department of Pediatrics, University of Louisville School of Medicine. Supported in part by Data Analysis Grant No. MCR-210102-04-0.
Paper received at KMA: 7-9-75*

Materials and Methods

Newborn sepsis was defined as the documentation of a positive blood culture associated with appropriate clinical signs and symptoms, in an infant 28 days of age or less. The criteria used have been outlined in our previous study.[4]

Patients were collected for calendar years 1973 and 1974 from Louisville General Hospital, with approximately 2,000 live births a year, and from Norton-Children's Hospitals, a referral perinatal facility for central and western Kentucky and southern Indiana, with approximately 460 admissions to the intensive care nursery yearly.

All charts coded as sepsis neonatorum from both hospitals were reviewed and correlated with bacteriologic records* of positive blood cultures. Those cultures considered contaminants on clinical and bacteriologic grounds, were eliminated. In addition, autopsy records at both hospitals were reviewed; the results of all postmortem blood cultures were obtained and utilized if not obvious contaminants.

Results

Forty-nine patients were found at Norton-Children's Hospitals fulfilling the stated criteria, and 12 were found at Louisville General Hospital. The results are shown in the tables. At General Hospital, 3 of 12 patients

Supplied at Norton-Children's Hospital by Ms. Charlotte Poh.

died for a mortality rate of 25%. At Norton-Children's, 19 of 49 died, a 39% mortality. These figures fall within the range of mortality rates previously reported in many series.

More than 40% of the General Hospital patients had Group B streptococcal infections. Early-onset infections (developing less than 48 hours after birth) had a 50% mortality rate. In our previous series, Group B streptococci represented only 14% of the isolates. Slightly more than 30% of the referral patients had Group B streptococcal disease; 80% of these were early-onset; the mortality rate was again 50%. The majority of infants with early onset infection had prolonged rupture of membranes greater than 24 hours and almost all presented with respiratory distress in the first 12 hours of life.

Discussion

Since first described in 1961,[14] Group B streptococcal sepsis has been a topic of increasing concern. An initial rigid definition of two forms of presentation of the infection, has given way to the recognition that there is a wide spectrum not only of types of presentation, but of the timing of onset.[13]

The problem that most concerns us is that of the "early-onset" Group B streptococcal infection in the neonate. Original reports on this infection generally reported a nearly 100% fatality rate.[7,11] While the mortality rate is still high despite appropriate antibiotic therapy, recent studies (including this one) show rates of approximately 50%;[10,12] one study had an early-onset mortality of only 31%.[8] We attribute this to increased recognition of the problem and early, aggressive antibiotic therapy.

Table I

CHILDREN'S HOSPITAL
NEONATAL SEPSIS
1973-1974

Organism	No.	Outcome
β-hemolytic strep Gr. B	15	Early onset — 6 lived, 6 died
		Late onset — 3 lived
E. coli	14	10 lived, 4 died
Staph aureus	5	Lived
Klebsiella	5	1 lived, 4 died
Pseudomonas	4	Died
Other	6	5 lived, 1 died
	49	

Total Mortality
19/49 = 39%

Table II

GENERAL HOSPITAL
NEONATAL SEPSIS
1973-1974

Organism	No.	Outcome
β-hemolytic strep Gr. B	5	Early onset — 1 lived, 1 died
		Late onset — 3 lived
E. coli	3	2 lived, 1 died
α-strep (non-hemolytic)	2	Lived
Pseudomonas	1	Died
Klebsiella	1	Lived
	12	

Total Mortality
3/12 = 25%

Although some studies have reported a preponderance of premature and/or low-birth-weight infants with early-onset infection, we have found most of our infants to be either large prematures or term infants. Several of our infants presented with clinical respiratory distress syndrome in age or size groups in which hyaline membrane disease is rare.

The findings presented here allow us to formulate some considerations about septic infants in general and early Group B streptococcal sepsis in particular:

1. Any infant suspected of sepsis should have appropriate cultures taken and therapy instituted immediately, with either penicillin or ampicillin plus Kanamycin in appropriate dosages.[15] As stated before, our approach to diagnosis and therapy has been outlined elsewhere.[4]

2. Particular attention should be paid to those infants of any size or degree of maturity, who present with respiratory distress in the first few hours of life. Chest x-rays should be obtained immediately, and any suspicious findings should prompt the use of antibiotics. We have not previously suggested, and do not now suggest, antibiotic treatment of all patients with respiratory distress; however, in view of the severity of Group B streptococcal disease and its high mortality rate, it may be prudent to utilize at least penicillin in suspected infants, until culture reports have been confirmed as negative.

3. Particular attention should be paid to those infants whose membranes have been rup-

tured greater than 24 hours, since these infants seem to be at higher risk. Cultures of the mother (cervix or lochia, placenta) and of the infant (ear, gastric, blood) should be obtained. The question of treatment of maternal cervical carriers of the Group B streptococcus, remains highly controversial, as does the therapy of the colonized infant (pure culture of the organism from one or more surface cultures).[6,9,12,16] At the present time, we do not feel that definitive statements regarding prophylactic penicillin therapy, can be made.

4. While emphasizing the new importance of the Group B streptococcus as a pathogen, we must not forget that gram negative organisms still play a major, undiminished role in newborn sepsis. For instance, in our previous report,[4] 26.0% of the blood culture isolates were of *E. coli*; the incidence in this study was 27%. This continued high isolation rate has been noted previously.[13]

Conclusion

The increasing frequency of newborn sepsis caused by the Group B beta-hemolytic streptococcus has been reported elsewhere and is now confirmed in our referral area of Kentucky and southern Indiana. It is hoped that increasing awareness of this organism and its clinical presentation will result in greater recognition with further reduction in mortality rates.

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Respiratory Failure Complicating Pancreatitis: A Case Report*

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and J. ANTONIO ALDRETE, M.D.

Louisville, Kentucky

Acute respiratory failure in a patient with severe pancreatitis is an uncommon, but ominous, complication. Prompt recognition and institution of mechanical ventilation, using positive end expiratory pressure, reversed the hypoxemia and pulmonary shunting characteristic of this syndrome.

THE pulmonary manifestations associated with acute pancreatitis have only recently been recognized.[1-4] Early recognition and aggressive therapy play an important role in the eventual outcome of the complication of pancreatitis. The purpose of this report is to present the chronological observations noted in a critically ill patient.

Case Report

A 29-year-old white man, with antecedents of chronic alcoholism, entered Louisville General Hospital with a four-day history of sharp epigastric pain of sudden onset associated with nausea and vomiting. The pain initially radiated to the back, but later extended to the entire abdomen. In addition, the patient had not had a bowel movement since the onset of the symptoms.

Past history revealed that the patient had productive cough and smoked two packs of cigarettes daily. He also had a long term history of alcoholic intake.

Physical examination on admission showed marked epigastric tenderness and guarding with some rebound tenderness also present. No bowel sounds were heard at auscultation.

Radiological examination of the chest showed a left lobe infiltrate and a flat plate of the abdomen revealed a dilated cecum and insinuation of paralytic ileus.

The serum electrolytes were within normal limits, but amylase was 594 dye u. Later that afternoon an exploratory laparotomy was performed and acute hemorrhagic pancreatitis was confirmed.

On the first postoperative day, the patient was found to have restlessness and cyanosis with blood pressure 90/50, pulse 132 and respirations 32 per minute; arterial blood gases showed pH = 7.42, PO_2 = 38.6 and pCO_2 = 45.1. At this time the trachea was nasally intubated and respiration was supported with a mechanical volume controlled ventilator. Roentgenogram of the chest showed diffuse, bilateral pulmonary infiltrate (Fig. 1).

Due to continuous deterioration, on the second postoperative day he was paralyzed with pancuronium and 10 cm of positive end expiratory pressure (PEEP) was instituted. The

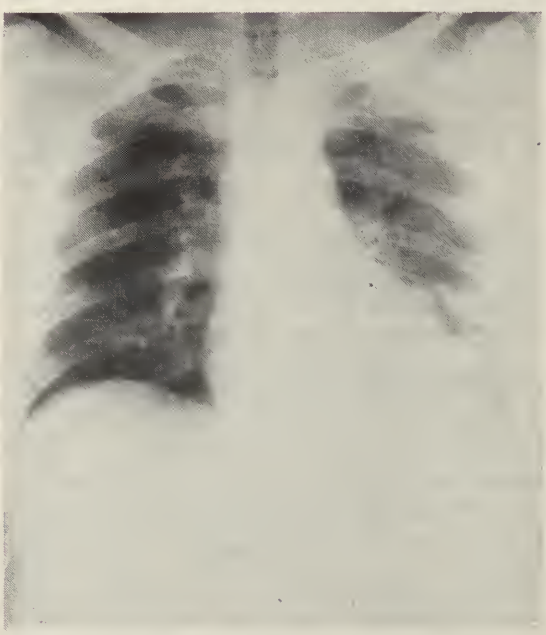


FIG. 1a. Chest roentgenogram taken at admission.

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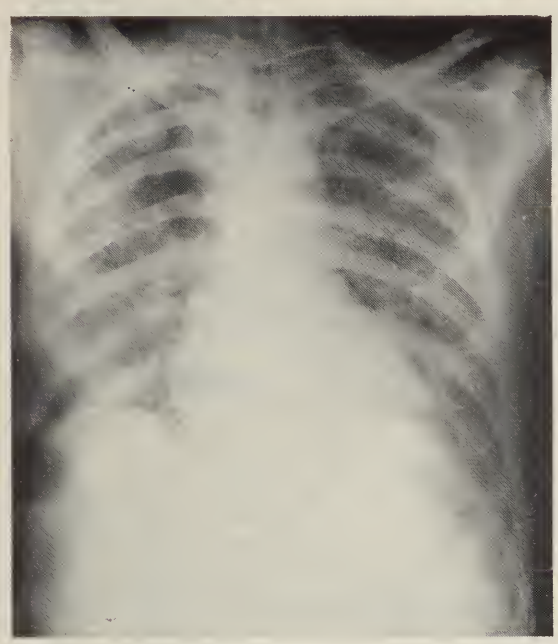


FIG. 1b. Chest roentgenogram taken on the second postoperative day.

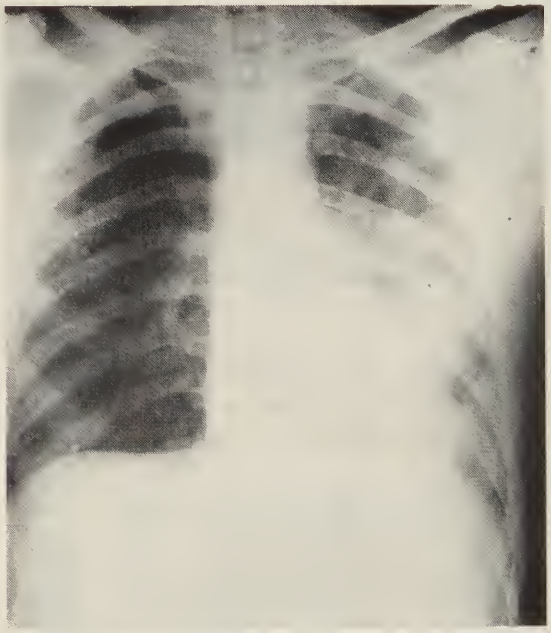


FIG. 1c. Chest roentgenogram taken on the fifth postoperative day.

chest x-ray (Fig. 2) revealed bilateral diffuse infiltrate and atelectasis. The intrapulmonary shunt was calculated to be 24%. On the third postoperative day, since clinical improvement was evident, the FiO_2 (fraction of the inspired oxygen) was decreased from 0.70 to 0.55. Serum amylase was 712 dye u. Later on, bronchoscopy and tracheostomy were performed to permit satisfactory tracheobronchial toilet.

As indicated in Figure 1, by the eighth postoperative day, PEEP was decreased to 5 cm, and on the following day it was discontinued. Similarly, the FiO_2 was decreased gradually and by the end of the second week the ventilator was discontinued and oxygen-air mixtures were given by mask at a rate of 9 L/min. supplemented by intermittent positive pressure ventilation every four hours. Throughout the case cultures of bronchial secretions failed to grow any pathogen organism. The changes of the respiratory indexes in relation to the trend of serum amylase alterations are shown in Figure 2.

Comment

The etiology of respiratory insufficiency following acute pancreatitis has been a subject of controversy. The presenting clinical picture in this case is typical of patients suffering severe acute hemorrhagic pancreatitis, complicated by progressive respiratory failure. Although only four per cent of patients with hemorrhagic pancreatitis develop pulmonary insufficiency, this added morbidity is a serious and ominous sign, since the mortality incidence increases from 15 to 55%.[2]

The thoracic radiological picture may vary from pneumonitis to atelectasis, pleural effusion and even infarction. Functionally, there is marked decrease of functional residual capacity, and total lung, tidal and minute volumes. However, more significantly, there is a reduc-

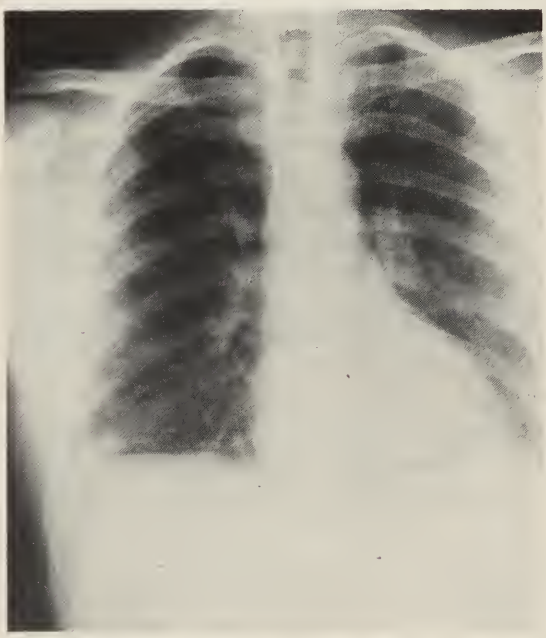


FIG. 1d. Chest roentgenogram taken on the 16th postoperative day.

tion of pulmonary compliance. Several theories have been postulated to explain the etiology of this syndrome. Among the factors which are intimately related is the widespread inflammatory reaction with involvement of the diaphragm causing reduction in the ventilatory excursion of the lungs.[5] Zieve speculated on the mechanism of increased lecithinase activity. Lecithin, the main constituent of pulmonary surfactant, has been demonstrated to be destroyed by lecithinase, resulting in an increase in the pulmonary surface tension and consequently a decrease in the pulmonary surface activity, which means alveolar collapse and atelectasis.[6]

Since a large portion of lung recoil is associated with the liquid interphase, consequently inflation of a given lung volume is accomplished at a lower pressure when liquid (surfactant) is present.[7] Alveolar dimensions require a living material with surface properties unlike those of plasma surfactant or other similar biologic fluids.

The use of a volume ventilator has a splinting effect on the alveoli and ultimately a better ventilatory function.[8] By increasing functional residual capacity, and improving distribution of gas and blood flow to previously underventilated and underperfused areas of the lung, PEEP allows for better gas exchange and transmission of increased airway pressure in order to reopen collapsed alveoli. Although in this case it was only necessary to go up to 10 cm H_2O, higher PEEP levels have been applied successfully[9] in more resistant cases (PEEP exceeding 20 cm H_2O).

The possible deteriorating effect on cardiac output has not been observed[10] when gradual increments of 5 cm of H_2O, in a step-up fashion, are implemented. By monitoring arterial oxygen tension with frequent arterial blood gas sampling one is able to recognize the level at which highest PaO_2 is attained, at the lowest FiO_2, without affecting arterial blood pressure.

Meanwhile, vigorous efforts to treat the primary disease, whether by drainage, irrigation of the peritoneal cavity or conservative management as discussed by Gliedman, et al.,[2] should be instituted. At all times a team approach between surgeons, internists and anesthesiologists used to deal with these problems should be aimed for.

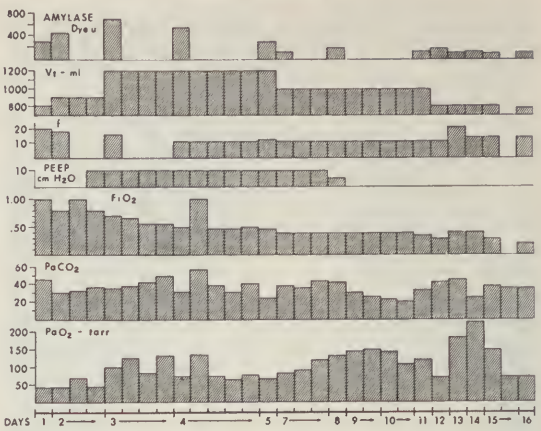


FIG. 2. Changes in serum amylase observed during the patient's hospitalization are correlated to alterations of arterial oxygen (PaO_2) and carbon dioxide ($PaCO_2$) tensions, as well as tidal volume (VT) and respiratory rate (f). Amounts of oxygen in the gas inspired mixture (FiO_2) as expressed in a fraction of a 1.0 unit = 100%, and positive end expiratory pressure (PEEP) required to maintain acceptable PaO_2 levels are also shown.

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GRAND ROUNDS

The University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Pulmonary Embolism

Patient Presentation

MR. A. C. is a 52-year-old white male who was admitted with left-sided pleuritic chest pain associated with hemoptysis and shortness of breath. He had been discharged two days earlier following uncomplicated cholecystectomy, receiving subcutaneous heparin postoperatively as prophylaxis against pulmonary embolism. He gives a history of previous pulmonary embolism in 1971 following renal stone removal and was on warfarin for approximately six months. He gave no history suggestive of peripheral thrombophlebitis.

On admission he was a well developed man in mild respiratory distress. The respiratory rate was 22/minute with harsh breath sounds at the left lung base without rales or dullness to percussion. The jugular venous pressure was normal, BP 130/80 and the pulmonary component of the second heart sound was accentuated. The rest of his physical examination was normal.

Laboratory Data: The EKG and chest x-ray were normal, PaO_2 77 mm Hg, $PaCO_2$ 33 mm Hg, pH 7.44, (the PaO_2 was 96 mm Hg on his previous admission), fibrin degradation products were greater than 40 mg/dl, the BUN and electrolytes were normal, hemoglobin: 14.8 gm%, WBC count: 14,500/cu mm with a slight leftward shift, the platelet count was 27,000/cu mm.

Hospital Course: Initially he was begun on intravenous heparin at 1,000 units per hour. The lung scan revealed a segmental defect in the left lower lobe with an initial dead space to tidal volume ratio (V_D/V_T) of 37% (predicted normal 33.4%). The spirogram revealed an FEV_1/FVC of 83 per cent. During the next six days he dropped his PaO_2 to 59mm Hg and increased his V_D/V_T to 65%. Repeat lung scan showed complete non-perfusion of the left lung. There was an arterial to alveolar PCO_2 gradient of 18 mm Hg, which did not alter with forced expiration. He was at that time felt to be adequately anticoagulated and venograms of the lower extremities revealed a large clot in the left popliteal fossa. An umbrella filter was placed in the inferior vena cava. He was kept on heparin for another week and gradually switched to warfarin and maintained on 7.5 mg daily. Repeat lung scan revealed re-perfusion of the left upper lobe with a concomitant decrease in the V_D/V_T to 44% and a repeat PaO_2 of 73 mm Hg on room air.

Other problems included thrombocytopenia with platelets in the range of 20-40,000/cu mm with a bone marrow showing increased megakaryocytes. A trial of prednisone 60 mg daily had no effect, but beginning the day following cessation of heparin, his platelets rose steadily to 196,000/cu mm at discharge. He also developed an *E. coli* urinary tract infection responsive to a 14-day course of gentamycin. IVP localized both kidneys on the right side.

Assessment: 1. Recurrent pulmonary thromboembolism. 2. Heparin-induced thrombocytopenia. 3. Urinary tract infection. 4. Ectopic right kidney.

Discussion

I plan to first discuss what we know of the incidence and pathophysiology of pulmonary embolism and then outline why, in 1975, it should be fully possible to come to a definite diagnosis in virtually every case of suspected pulmonary embolism. Let us first examine the incidence of pulmonary embolism in the United

States. There is a large total yearly incidence of approximately 630,000, of whom 11% die within the first hour; of the 89% of patients who survive longer than one hour there is a marked difference between those who are diagnosed and treated and those who are not. In the 71% of patients in whom no diagnosis is made, 30% die. In the 29% in whom diagnosis is made and therapy is instituted only 8% die. We are not diagnosing a large number of patients who do get pulmonary embolism, and in them there is a significantly increased mortality. Ninety percent of all pulmonary emboli come from below the bifurcation of the inferior vena cava, and the vast majority of these come from the leg veins. Furthermore, 80% of thrombosis in the legs starts in the calf. However, clinical pulmonary embolism probably only occurs when the venous thrombosis has propagated above the knee.

What are the causes of venous thrombosis? One hundred years ago Virchow enunciated the three major factors involved in vascular thrombosis: Hypercoagulability of the blood, stasis of blood flow in the vessels, and damage to the vessel wall. On the basis of currently available evidence it appears likely that hypercoagulability of the blood is the key factor which initiates the process of venous thrombosis and activated factor 10 appears to play a pivotal roll. Blood stasis, by itself does not cause thrombosis, but it may be an additional factor in the causation of venous thrombosis. Vessel wall injury is probably only of very minimal importance.

Let us discuss first the response of the heart and lungs to embolism. It is likely that the majority of pulmonary emboli are silent and multiple. In experimental animals and in man the embolus undergoes rapid lysis, probably in a matter of three or four hours. So the patient with pulmonary embolism is probably throwing off showers of emboli which are rapidly being lysed.

What are the effects of pulmonary embolism on the lungs? There are six main effects: Firstly, the total deadspace increases, so the PaO_2 falls. Secondly, there is a reflex hyperventilation probably through stimulation of J-receptors in the lung parenchyma; this leads to a fall in $PaCO_2$ Thirdly, a local bronchoconstriction may occur due to the local decrease in alveolar PCO_2. Fourthly, alveolar surfactant, which is dependent on a continuous pulmonary blood flow for its nutrient supply, disappears and atelectasis occurs. Pulmonary infarction, due to lung necrosis, occurs in less than 20% of documented cases of pulmonary embolism. Finally, a pleural effusion may occur; contrary to previous teaching, this is usually a serous fluid and rarely hemorrhagic.

What is the effect of the embolus on the heart? The hemodynamic effects are dependent on two things: The size of the embolus and the preexisting state of the cardiopulmonary system. The pulmonary vascular bed is unique in that it is the only vascular bed in the body that receives all the cardiac output, and in normal subjects on exercise the cardiac output may increase eightfold, with little rise in the pulmonary artery pressure. In animals and in man, in order to create pulmonary hypertension, you have to get rid of more than 50% of the total pulmonary vascular bed with pulmonary embolism, for instance as little as 25% of the total pulmonary vascular bed, result in an elevation of the pulmonary artery pressure. This suggests that, in addition to the mechanical factor, there is an associated pulmonary vasoconstriction. This is probably due to the release of serotonin and other vasoactive amines, either from the embolus itself or the area which is atelectatic or infarcted. In subjects without preexisting heart or lung disease it has been demonstrated that the hemodynamic effects are directly correlated with the size of the embolus and when the pulmonary artery mean pressure rises above 30 mm Hg there is a rise in the right atrial pressure; this occurs when more than 35% of the pulmonary vascular bed is obstructed. Thus, if a patient without preexisting cardiopulmonary disease presents with an embolus and an elevated jugular venous pressure, he must have a greater than 35% obstruction of his pulmonary vascular bed. Secondly, the normal right ventricle is unable to achieve a mean pressure greater than 40 mm Hg. So in a patient with a pulmonary embolus, if the right ventricular or pulmonary artery mean pressure is greater than 40 mm Hg, the patient has preexisting right ventricular hypertrophy which may be a result of previous emboli, or of chronic lung disease, or chronic left heart disease.

What is the natural history of pulmonary embolus? In one series of 63 patients followed for up to seven years, there was complete

resolution in 65%, partial resolution in 23%, and the embolic obstruction remained unchanged in 12%. In this last group of 12% (five patients), only one was symptomatic, and he developed corpulmonale. Thus, corpulmonale as a result of pulmonary embolism is very rare.

Accurate diagnosis of pulmonary embolism is very important. Not least of the reasons is that hemorrhagic complications due to anticoagulant therapy have ranged from 27% in the Urokinase pulmonary embolism trial, and in other series it has ranged from 2-15%. Furthermore, in a recent report of 2,107 autopsies, false positive clinical diagnosis of pulmonary embolism ran as high as 62%, suggesting that a lot of patients are being erroneously treated for pulmonary embolism.

For diagnosis the first and most important thing is for the clinician to be very, very aware of the problem. Who are the patients at particular risk of developing pulmonary embolism? The highest risk factor is underlying cardiopulmonary disease; bed rest, particularly following surgical operations, makes patients vulnerable and in this regard operations on the hip are particularly important. Previous embolism, age over 60 years, and peripheral venous disease are all risk factors. The most important symptom is the sudden onset of tachypnea and dyspnea. This can be demonstrated in experimental animals. When they are embolised they suddenly get breathless. There is only one other condition which will do this and that is pneumothorax. Therefore, the sudden onset of dyspnea and tachypnea, whether in a normal patient or in a patient who has chronic lung disease is very suggestive. In one series, 81% of patients with pulmonary embolism had dyspnea. The incidence of other symptoms such as pleural pain, cough, hemoptysis, syncope, etc., is much lower and ranges from 10% to 40%. The most common sign is again tachypnea, tachycardia, mild pyrexia, râles over the affected pulmonary area and an increased intensity of the pulmonary component of the second heart sound occur in 40% to 50% of cases. Pulsus paradox (a fall in systolic blood pressure greater than 10 mm Hg on inspiration) and Kussmaul's sign (evaluation of jugulovenous pressure on inspiration) have also been described in severe pulmonary embolism. Thus, although the symptoms and signs are helpful, none of them is diagnostic and we have to turn to laboratory tests.

Electrocardiographic changes probably occur in less than 30% of cases. Virtually every kind of electrocardiographic abnormality has been described; however, no electrocardiographic change is diagnostic. In the Urokinase pulmonary embolism trial series the commonest abnormalities, present in 42% of cases, were in the RST segment and/or T-wave.

Various alterations in blood enzymes have been investigated in the diagnosis of pulmonary embolism. The diagnostic triad of elevated serum LDH and bilirubin with a normal SGOT has been abandoned due to its nonspecificity. Recent interest has centered on the measurement of the products of fibrinolysis as evidence of thrombosis. Fibrin, which forms the meshwork of the clot, begins to be rapidly lysed and the degradation products of fibrin (fdp) and of fibrinogen (FDP) are elevated with venous thrombosis and pulmonary embolism. Unfortunately there are also a wide variety of other diseases in which these products would be elevated, e.g. large hematoma, tumors, sepsis, after surgery, in a number of auto immune renal diseases, etc. Furthermore, elevated levels of fdp/FDP do not distinguish between venous thrombosis and pulmonary embolism. Thus, a normal level of fdp/FDP is helpful in excluding recent pulmonary embolism; elevation of fdp/FDP is too nonspecific to be more than a confirmatory test. Recently, a radioimmunoassay of fragment E, one of the degradation products of fibrin, has been shown to be more specific for pulmonary embolism and to be elevated for a longer period of time. Another promising test, recently described, is the measurement of platelet specific protein, betathromboglobulin, which is apparently released when platelets clump together.

What is the rôle of pulmonary function tests in the diagnosis of pulmonary embolism? Currently there are three tests which are particularly helpful. A pulmonary embolus creates an increase in the total deadspace, i.e. there is an additional area of lung which is being ventilated, but not perfused. This results in a fall in the PaO_2, an increase in the deadspace to tidal volume ratio (V_D/V_T), and an increase in the arterial to alveolar pCO_2 gradient (a-A)DCO_2. In the majority of patients the PaO_2 is decreased; however, the PaO_2 may be normal. A major difficulty in interpretation is that most of these patients have underlying

cardiopulmonary hypoxaemia. On the other hand, a PaO_2 above 90 mm Hg argues strongly against embolism. Although an increase in V_D/V_T and $(a\text{-}A)DCO_2$ has been sporadically suggested as a test of pulmonary embolism for nearly two decades, there have been problems in interpretation in the presence of airways obstruction and the difficulty of accurately sampling alveolar gas. Two recent studies have examined the value of measurement of the $(a\text{-}A)DCO_2$, and have shown that in the absence of significant airways obstruction the test correlates well with angiographic demonstration of pulmonary embolism. The effects of airways obstruction on the $(a\text{-}A)DCO_2$ can be evaluated by observing the difference in the end-expired pCO_2 during resting respiration compared to forced expiration; if there is little change between the two values and a significant difference between the forced end-expiratory PCO_2 and $PaCO_2$ remains, pulmonary embolism appears likely. In our laboratory we measure the V_D/V_T by collection of an expired gas sample and also the $(a\text{-}A)DCO_2$; in addition airways resistance is measured by spirometry. We find a good correlation between V_D/V_T and $(a\text{-}A)DCO_2$ and angiographic demonstration of pulmonary emboli, as in the case presented today, and these tests appear useful in following the course of pulmonary embolism.

The chest x-ray may show no abnormality in up to 20% of cases. In most cases one or more of a wide variety of abnormalities may be seen, atelectasis and/or consolidation (50%), elevated hemidiaphragm (41%), pleural effusion (28%), etc. None of these changes is diagnostic. Pulmonary perfusion scanning with radioisotopes (usually technetium-^{99}M albumin microspheres) has recently been evaluated in comparison to angiography. It has been found that a high probability perfusion scan (defect in a lobar arterial or segmental distribution) is 77% to 84% diagnostically accurate. However, in association with a chest x-ray showing any two of the features of embolism, the diagnostic accuracy approaches 100%. It is important to note that a four view scan should be done in all cases. The place of ventilation scanning in association with a perfusion scan is not yet clear; clearly, a perfusion defect with normal ventilation in any area would strongly suggest an embolus. However, in patients with chronic airways obstruction, interpretation is difficult.

Pulmonary arteriography is still considered the standard absolute diagnostic test for pulmonary embolism, although recent work suggests that the perfusion scan may be more sensitive as indeed may elevation of V_D/V_T. The diagnostic accuracy of pulmonary angiography is enhanced by doing selective pulmonary angiograms using magnified views. This technique will demonstrate vessels as small as 0.5 mm diameter. In experienced hands the procedure has been shown to be very safe; in one series of 310 pulmonary angiograms there were no fatalities.

Finally, as exemplified by the case discussed today, documentation of deep leg vein thrombosis (DVT) is an important part of the investigation of pulmonary embolism. It is important because diagnosis of DVT by physical examination is correct in only about 30% of cases and the false positive rate of diagnosis is greater than 50%. Thus, many patients are put on long-term anticoagulants without good evidence of DVT. The classical method used is venography with injection of contrast material into the leg veins. However, many non-invasive methods are now available: electrical impedance plethysmography, venous thermography, Doppler flow measurements, in addition to the measurement of the uptake of I^{131} labelled fibrinogen. All these methods have been shown to correlate extremely well with contrast injection venography.

In conclusion then, the diagnosis of pulmonary embolism is based on a careful history and examination, and the measurement of arterial blood gases, fdp/FDP, EKG and chest x-ray. These tests will suggest the diagnosis which should be confirmed by lung perfusion scanning and measurement of V_D/V_T and $(a\text{-}A)DCO_2$; occasionally it may be necessary to perform a pulmonary angiogram. Deep vein thrombosis should always be documented, preferably by one of the non-invasive techniques now available.

Nausherwan K. Burki, M.B., Ph.D.

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(References continued on page 676)

EDITORIAL

We Are Grateful

THE CHRISTMAS SEASON is a time of joy for most—of cheer, the exchange of gifts with those we love, of festivities and happiness. For others, less fortunate, this is not so, and to them we owe our prayers, our charitable thoughts and deeds.

Christmas is also a time for us to sit back and reflect upon those things for which we should be most grateful, and the individuals who made them possible for us to enjoy.

Our Association has much to be grateful for as we review 1975. Faced with crises and many serious and aggravating problems, the Association has acted responsibly with integrity and dignity. Much of the credit must go to the excellent leadership of our elected officers and Board and to the excellent leadership of our elected officers and Board and to an Administrative Staff second to none in ability, diligence and dedication.

But, let us not forget our Members! As individuals, we owe a debt of gratitude to the physicians of Kentucky who constitute our Association. They have continued, with few exceptions, to provide high quality medical care to the citizens of this Commonwealth in spite of the crises, the aggravations and the problems with which they have been faced. They have endeavored to "police their ranks" through all levels of the peer review mechanism as well as the Board of Licensure despite the legal roadblocks (actual or threatened) thrown up to forestall such efforts. They have served diligently and without recompense on innumerable committees serving the interest of all.

Adversity, however, is not without its benefits. The problems and frustrations of 1975, it seems to us, have served to unify the profession in Kentucky to a degree that has not heretofore been achieved. The actions of the House of Delegates, recorded in this issue as well as the November issue of *The Journal,* reflect many significant policies and positions adopted by a unanimous vote of the Delegates. Of equal interest is the fact that 85% of the members of KMA have voluntarily joined the AMA—ample evidence that the physicians of Kentucky do believe in and support THEIR organization.

We have many, many reasons to be proud of our Association and to be grateful to the physicians who are its members.

The Editors would be remiss if they did not, at this time, express their appreciation to the authors of the excellent contributions to the scientific pages of *The Journal,* and to our advertisers. Without them there would be no *Journal!* HBA

The Editors and Staff of The Journal Of KMA Extend To Our 1975 Advertisers Sincere Thanks and Best Wishes for a Merry Christmas and a Happy New Year

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MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

Case 13-73. This 29-year-old, married, white, Gravida 4, Para 1, was seen by a private physician. Past obstetrical history is pertinent. She aborted at 18 weeks in 1964. In 1965, she delivered at 26 weeks a living infant; however, it expired due to prematurity. In 1967, she had a cervical ligature performed at 22 weeks due to threatened premature labor. She continued that pregnancy till approximately 30 weeks. The infant weighed 3 lb. 5 oz. and survived.

With this pregnancy, her last menstrual period was December 9, 1972, with the EDC September 16, 1973. She again had a cervical ligature at 16 weeks and had no additional significant contractions.

She was admitted to the hospital at 2:45 a.m., September 15, 1973, having mild, irregular contractions, membranes ruptured spontaneously prior to admission. She was leaking a large amount of cloudy amniotic fluid. By 6 a.m. on the 15th, she was having moderate contractions every 6-15 minutes. Vaginal examination revealed the cervix 3 cm dilated and the cervical ligatures could easily be felt. She was given a paracervical and pudendal block and taken to the delivery room to cut the cervical ligatures. At 7 a.m. after the ligatures had been cut, she appeared to be bleeding excessively from a cut in the cervix. Blood pressure dropped from 124/80 to 60/40. Excessive bleeding continued until a vaginal pack was inserted and held on the cervix. This seemed to help, but her blood pressure returned to 82/50 and the fetal heart tone, which dropped, returned to 104. She was returned to the labor room and again had a drop in blood pressure to 60/40. Another physician was called to see her. She was taken to the delivery room to attempt to suture the cervix, which was considered the source of the bleeding. Ringers solution was started IV with Oxytocin added to help the quality of contractions. This did not help, so the Oxytocin was replaced with plain Ringers solution. The cervix was rechecked and it was felt the major bleeding was actually intrauterine. Blood was ordered and cut downs performed on both ankles with fluids and blood started. A subclavian catheter was inserted and blood was also given through this. It was felt the patient should be delivered by Cesarean section as soon as her condition would tolerate it. The fetal heart could no longer be heard. She was observed to be bleeding from all cut downs at 8 a.m. The section was performed during which the patient had a cardiac arrest on two occasions. Through electrical shock, her rate was reestablished. An abdominal hysterectomy with bilateral salpingo oophorectomy was performed. The stillborn male infant appeared term size, approximately 7-1/2 lbs. The bleeding was from a low lying placenta.

She was transferred to the intensive care unit, bleeding from many places. Another consultant saw her in intensive care. In spite of many units of blood and fibrinogen, no clot could be demonstrated. It was apparent she had a profound coagulopathy.

There was no autopsy. The final diagnosis was placenta previa with coagulopathy.

Comments

The Committee classified this as a direct obstetrical death with preventable factors. The first item was the question of the incompetent cervix. According to the protocol given to the Committee, the patient was having uterine contractions. The typical patient with incompetent cervix does not have demonstrable painful contractions but the cervix slowly dilates and the products of conception are usually delivered painlessly. The diagnosis of the low-lying placenta evidently was not made and manipulation of the cervix caused profuse bleeding. The question of the lacerated cervix was also present, although, according to the report, we cannot be certain of this. The Committee raised the question as to why the performance of a total hysterectomy and bilateral salpingo oophorectomy since it would seem that a Cesarean section and control of the bleeding from the cervix and the placental sight could have been carried out without this major procedure. However, from the material presented to the Committee one could not be certain about the condition when the abdomen was open.

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IMPORTANT INFORMATION: *This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdosage or individual hypersensitivity, reactions similar to those alter meperidine or morphine overdosage may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Nalline® (nalorphine HCl) or Narcan® (naloxone HCl) or may be evidenced as late as 30 hours after ingestion. LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.*

Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with special caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis. In severe dehydration or electrolyte imbalance, withhold Lomotil until corrective therapy has been initiated.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage. Use with care in patients with acute ulcerative colitis and discontinue use if abdominal distention or other symptoms develop.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing, hyperthermia, tachycardia and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria, paralytic ileus, and toxic megacolon.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, hyperthermia, tachycardia, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. A narcotic antagonist may be used in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner, Food and Drug Administration

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the



Dr. James H. Sammons
Executive Vice President of the American Medical Association

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the inforrnation is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

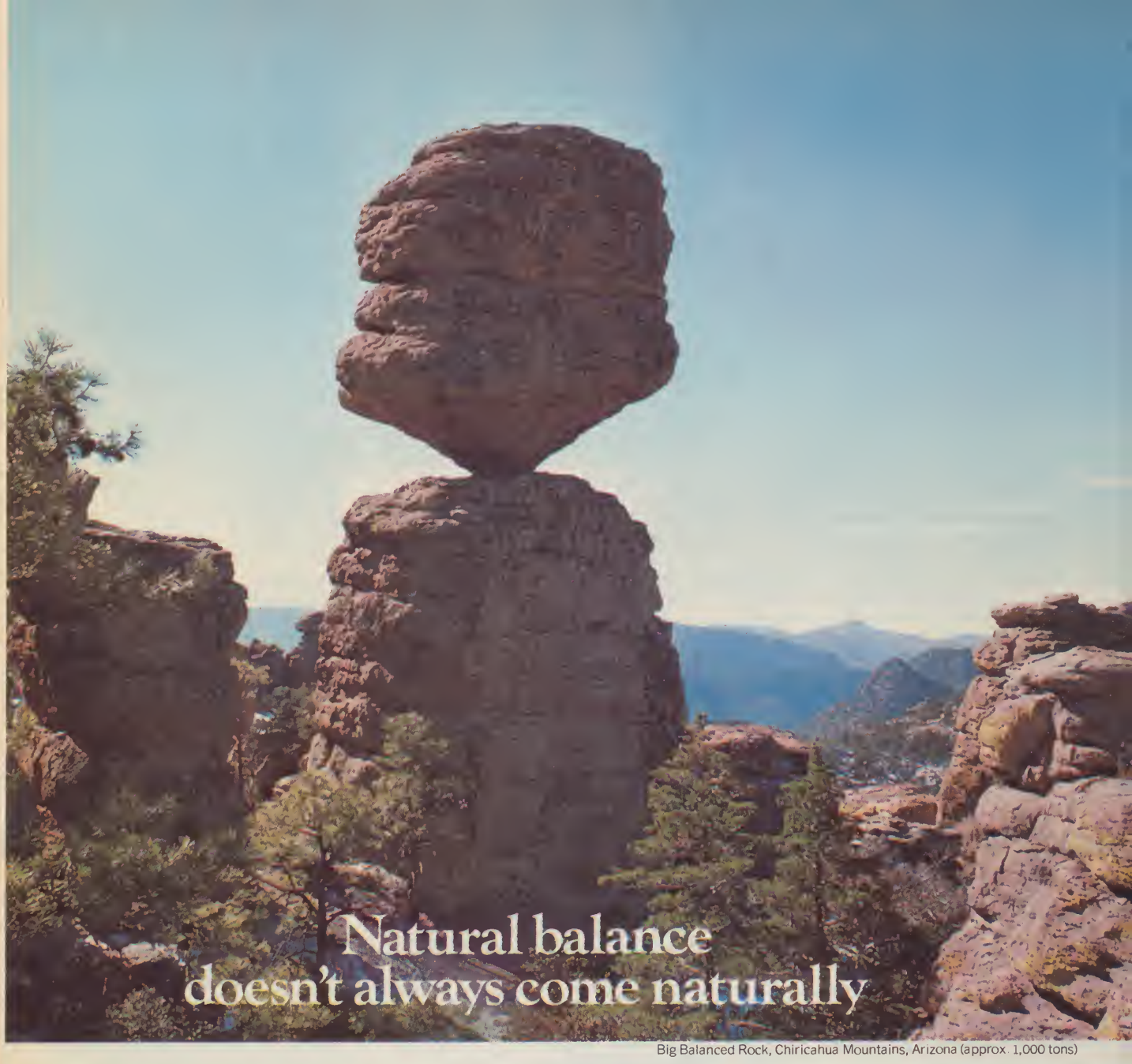
The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

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Can relieve nausea and vomiting often associated with vertigo.*

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Also available as Antivert (meclizine HCl) 12.5 mg. scored olets, for dosage convenience and flexibility.

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IEF SUMMARY OF PRESCRIBING INFORMATION

INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified he indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with notion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further nvestigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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ORGANIZATION SECTION

KLA Publishes Proceedings Of Lung Diseases Meeting

The Kentucky Lung Association announces the publication of "Proceedings and Recommendations from the First Campbell House Conference on Chronic Obstructive Lung Diseases in Kentucky." The Conference, held October 3-4, 1975, in Lexington, was patterned after similar successful conferences held in the same location dealing with tuberculosis.

Subjects covered were the definition of chronic obstructive airway disease, its causes, aggravation, diagnosis and care along with information regarding available resources in Kentucky for acute and chronic care and rehabilitation. Interested physicians may obtain a copy of the report by writing the Kentucky Lung Association, P.O. Box 8405, 4100 Churchman Avenue, Louisville, Kentucky 40208.

From the Medical Assistants

DOCTOR: Is your medical assistant keeping in step with you? Consider membership in the American Association of Medical Assistants. This is a professional association for medical assistants, secretaries, nurses, technicians, bookkeepers or receptionists in a Doctor's office or other medical facility.

Education is our goal. Each medical assistant is encouraged to take part in all educational programs. Seminars and regional conferences, as well as the Annual State and National Convention, offer a variety of educational sessions, including latest developments in the health care field.

For further information contact:
Mrs. Claire Brouilette, R.N., Membership Chairman, Kentucky Society, AAMA, 9804 Creekwood Road, Louisville, Kentucky 40223.

Specialty Groups Report New Officers

Kentucky Obstetrical and Gynecological Society: Mervel V. Hanes, M.D., Louisville, President; C. Ray Potts, M.D., Louisville, Vice-President, and Hugh Adkins, M.D., Louisville, Secretary-Treasurer.

Kentucky Society for Plastic and Reconstructive Surgery: Raleigh Archer, M.D., Lexington, President; Norman M. Cole, M.D., Louisville, President-Elect; Gerald Verdi, M.D., Louisville, Vice-President, and Morton L. Kasdan, M.D., Louisville, Secretary-Treasurer.



Doctor Ephraim McDowell was posthumously honored by the American College of Obstetrics and Gynecology in a presentation August 13, 1975, at the McDowell House in Danville. George Grider (center), curator of the House, accepted a plaque citing the election of Doctor McDowell as an honorary fellow from William E. Pugh, M.D. (left), Louisville and Lee Stevenson, M.D. (right), Farmington, Michigan. Doctor Pugh is the Chairman-Elect of District V of the College, which includes Kentucky, Ohio, Michigan and a section of Canada. Doctor Stevenson is the current Chairman of District V.

Kentucky Orthopaedic Society: Carl Friesen, M.D., Lexington, President; Robert Goodwin, M.D., Bowling Green, President-Elect and Vice-President; and Darius Ghazi, M.D., Louisville, Secretary-Treasurer.

Kentucky Urological Association: Joseph E. Maurer, M.D., Louisville, President; John J. Robbins, M.D., Louisville, President-Elect, and Albert H. Joslin, M.D., Owensboro, Secretary-Treasurer. (To take office January, 1976.)

Kentucky Psychiatric Association: Wiley E. Kozee, M.D., Ashland, President; John F. Ice, M.D., Louisville, President-Elect; C. William Briscoe, M.D., Corbin, Vice-President; William D. Weitzel, M.D., Lexington, Secretary, and James David McNeely, M.D., Louisville, Treasurer. (To take office April, 1976.)

Kentucky Chapter, American Academy of Pediatrics: Don A. Cantley, M.D., Henderson, President (1974-77); Joan E. Rider, M.D., Lexington, Vice-President, and Patrick Jasper, M.D., Somerset, Secretary-Treasurer.

In Memoriam

WILLIAM H. ALLEN, M.D.
Louisville
1885-1975

William Hogue Allen, M.D., 90, died on September 26. A Louisville pathologist, Doctor Allen was a 1915 graduate of the University of Louisville Medical School. Until his retirement in 1969, Doctor Allen owned and operated the Louisville Research Laboratory. An emeritus member of the Kentucky Medical Association, Doctor Allen was a charter member of the Kentucky Society of Pathologists.

GEORGE F. McAULIFFE, M.D.
Louisville
1911-1975

George Francis McAuliffe, M.D., a dermatologist, died on November 1 at the age of 65. Doctor McAuliffe graduated from the University of Louisville in 1936 and served almost five years as a captain in the Navy Medical Corps. Active in numerous religious organizations, Doctor McAuliffe also belonged to the Jefferson County Medical Society and Kentucky Medical Association.

News Items

Recently inducted as Fellows of the American College of Surgeons are: **Anthony George, M.D., Morton L. Kasdan, M.D., Joseph C. Marshall, Jr., M.D., Maynard L. Stetten, M.D.** and **Robert Lee Fulton, M.D.,** all of Louisville, and **Major Marshall Ray Johnson** of Elizabethtown, who is serving in the Army Medical Corps.

Lawrence A. Davis, M.D., Louisville, was recently elected President of the Society for Pediatric Radiology. Doctor Davis is Chairman of the Department of Radiology at Norton-Children's Hospital and is Professor of Radiology at the University of Louisville School of Medicine.

Pulmonary Embolism

(Continued from page 666)

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Register Now For 1976 KEMPAC/AMPAC Political Workshop

January 15, 1976 is the date KEMPAC/AMPAC, in conjunction with the Woman's Auxiliary, are planning a one-day workshop on overall political involvement and how it applies to the medical profession. The workshop will be held at the Ramada Inn, Bluegrass Convention Center, Louisville. The program will start at 10:30 a.m. EST and conclude at 9:00 p.m. EST. Topics will include Psychological Aspects of Running for Office; Woman's Role in Politics; Role of a Candidate; How to Form a Candidate Support Committee and AMPAC Overview.

There will be a registration fee of $5 per person, which will cover the luncheon and dinner. Reservations are necessary and must be in by January 10, 1976. Please clip the coupon below and mail with your check to:

KEMPAC
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

I plan to attend the Political Workshop January 15, 1976.

Luncheon _____ Yes _____ Number of Reservations _____ No

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The Joseph B. Marvin Memorial Meeting of The Kentucky Medical Association

Ramada Inn, Bluegrass Convention Center, Louisville, Kentucky, September 23-25, 1975

Digest* of Proceedings of the Regular Sessions of the

HOUSE OF DELEGATES

Carl Cooper, Jr., M.D., Bedford

Speaker of the House, Presiding

First Session

Speaker Cooper called the 125th Meeting of the KMA House of Delegates to order at 9 a.m. and asked Paul J. Parks, M.D., Bowling Green, to give the invocation. He then called on Carl H. Scott, M.D., Lexington, Chairman of the Credentials Committee, to give the report of the Credentials Committee. Doctor Scott reported that a quorum was present. A motion was made, seconded and passed that the Minutes of the 1974 session of the House of Delegates be approved as published in the December, 1974, *Journal of the Kentucky Medical Association.*

S. Randolph Scheen, M.D., Louisville, KMA Secretary, gave several announcements. He noted that every member of the House, as well as officers, trustees, and committee members of KMA, were covered by a $50,000 accident insurance policy upon leaving their residence to perform official duties for the Association. He announced the scientific sessions would begin at 8:50 a.m., Tuesday in the Convention Center; and stressed that the highlight of the Annual Meeting, the President's Luncheon, would take place in the Convention Center on Wednesday at 11:50 a.m. The Secretary reminded the Delegates that the Nominating Committee for general offices would meet at the close of the first session of the House, and Reference Committees would convene at 2 p.m., Monday in various rooms of the Convention Center. He reported that the Board of Trustees, in its meeting the day previous, had voted to open the Reference Committee meetings to the press for this year only. He stated the Message Center would again be in operation throughout the Annual Meeting, and emphasized the importance of visiting the technical and scientific exhibits.

Doctor Scheen read a list of member physicians who had died since the 1974 meeting of the House of Delegates, following which the members of the House stood for a moment of silent tribute. The names of the physicians, their locations and dates of death are as follows:

Asher, George Matt	Pineville	September 24, 1974
Barrett, Carey Carter	Lexington	May, 1974
Bell, Samuel G.	Murray	April, 1975
Brooks, P. C.	Pennyrile	
Cook, Clinton C.	Louisville	December 30, 1974
Cooper, Arthur Lewis	Somerset	July 22, 1975
Corum, Paul Edwin	Midway	February, 1975
Dahl, Harold L.	Covington	June 6, 1975
Ertel, Robert J.	Covington	July, 1975
Fadell, Edward J.	Louisville	May 17, 1975
Futrell, John	Cadiz	September 2, 1974
Gillispie, Virgil Clay	Wilmore	February 22, 1975
Haley, Raymond C.	Pikeville	July, 1975
Harris, Bascom Thomas	Lexington	
Herring, Harry Galloway	Lexington	January 7, 1975
John, Ellsworth H.	Harrodsburg	1974
Imes, Pat Ryan	Louisville	July 14, 1975
Lebendiger, Alvin	Louisville	November 25, 1974
Lira, Antonio U.	Covington	February 9, 1975
Lockwood, Kenneth Leroy	Covington	October, 1973
Lucas, Marvin Andrew	Louisville	September 28, 1974
Martin, Jesse Jack	Tompkinsville	August 3, 1975
Miller, Aura J.	Louisville	February 6, 1975
Moody, Henry Hatcher	Owensboro	November 15, 1974
Oldham, John Samuel	Cynthiana	August 15, 1975
Payton, Leland Early	Lynch	November, 1974
Pryor, Will Rowan	Louisville	February 1, 1975
Rompf, John Henry	Lexington	December 2, 1974
Segerberg, Ludwig H.	Louisville	November 26, 1974
Shafer, Cecil W.	Louisville	1975
Walton, Claiborne J.	Milltown, Ind.	September, 1974
Wynn, Joseph J.	Louisville	June 12, 1975

A member of the Pennyrile Multi-County Society read a Memorial Resolution in honor of P. C. Brooks, M.D. A motion was made, seconded and passed that the Resolution be accepted.

Doctor Cooper announced the Reference Committee appointments as follows:

**Editorial Note: A tape recording was made of the two sessions of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recording.*

Reference Committee No. 1
Peter P. Bosomworth, M.D., Lexington, Chairman
Don E. Cloys, M.D., Richmond
Michael B. Flynn, M.D., Louisville
Wally O. Montgomery, M.D., Paducah
Raymond D. Wells, M.D., Inez

Reference Committee No. 2
Nelson B. Rue, M.D., Bowling Green, Chairman
Colby N. Cowherd, M.D., Lexington
Harold D. Haller, M.D., Louisville
Cecil D. Martin, M.D., Carrollton
Don R. Stephens, M.D., Cynthiana

Reference Committee No. 3
Earl P. Oliver, M.D., Scottsville, Chairman
McHenry S. Brewer, M.D., Louisville
Kenneth M. Eblen, M.D., Henderson
Harvey A. Page, M.D., Pikeville
John M. Stoeckinger, M.D., Lexington

Reference Committee No. 4
Walter R. Brewer, M.D., Lexington, Chairman
T. J. Ferriell, Jr., M.D., Elizabethtown
Robert K. Johnson, M.D., Covington
James P. Moss, M.D., Louisville
N. H. Talley, M.D., Princeton

Reference Committee No. 5
Danny M. Clark, M.D., Somerset, Chairman
W. E. Becknell, M.D., Manchester
Frank B. Radmacher, M.D., Louisville
Forest F. Shely, M.D., Campbellsville
Robert E. Smith, M.D., Covington

Reference Committee No. 6
David L. Stewart, M.D., Louisville, Chairman
John M. Baird, M.D., Danville
Gary D. Givens, M.D., Central City
C. Nicholas Kavanaugh, M.D., Lexington
M. L. Peyton, M.D., West Liberty

Doctor Cooper announced that the tellers for both sessions would be B. B. Baughman, M.D., Frankfort, Chairman; R. Brooks Howard, M.D., Louisville, and R. D. Pitman, M.D., Williamsburg.

The reports of the officers and committees were presented by the Speaker and referred to a Reference Committee as follows: (Only the reports of the officers were read.)

Report of the President was referred to Reference Committee No. 1 with the following exceptions: The section pertaining to liability insurance was referred to Reference Committee No. 3; the section pertaining to Medicare and Medicaid was referred to Reference Committee No. 5; the section pertaining to KEMPAC and the sections dealing with legislation were referred to Reference Committee No. 3; and the section pertaining to continuing medical education was referred to Reference Committee No. 2.

Report of the President, Woman's Auxiliary to KMA—Reference Committee No. 1.

Report of the President-Elect—Reference Committee No. 1.

Report of the Speaker and Vice Speaker of the House—Reference Committee No. 1.

Report of the Chairman, Board of Trustees—Reference Committee No. 1, with the following exceptions: The report of the Ad Hoc Committee on Foreign Medical Graduates was referred to Reference Committee No. 5; the report of the Ad Hoc Committee on Peer Review Expenses was referred to Reference Committee No. 4; and the section pertaining to Professional Liability Insurance was referred to Reference Committee No. 3; the report of the Ad Hoc Committee on Mental Health-Mental Retardation was referred to Reference Committee No. 5.

Report of the Secretary—Reference Committee No. 1.

Report of the Editor—Reference Committee No. 1.

Report of the Treasurer—Reference Committee No. 1.

Report of the Delegates to AMA—Reference Committee No. 1.

Report of the Executive Director—Reference Committee No. 1.

At 10:20 a.m. the Kentucky State Association of Medical Assistants served coffee and sweet rolls to the members of the House in the lobby of Ramada Inn.

Following the short break, the Speaker announced that each of the presidents of the American Medical Students Association Chapters in Kentucky had been invited to give an oral report to the House. The President of the University of Louisville AMSA Chapter, Mr. Dan Miller, was present and did make such a report.

Doctor Hoyt Gardner, KMA President, presented the 1975 Faculty Scientific Achievement Awards to the University of Louisville recipient, John H. Wallace, Ph.D., and the University of Kentucky recipient, Frederick J. Bollum, Ph.D.

Doctor Cooper then introduced the President of the American Medical Association, Max H. Parrott, M.D., of Portland, Oregon, who proceeded to the podium to address the House.

Following Doctor Parrott's statements, the Speaker continued with the referral of reports to the Reference Committees.

Report of the Judicial Council—Reference Committee No. 6.

Report of the Rural Kentucky Medical Scholarship Fund—Reference Committee No. 6.

Report of the Board of Directors, Kentucky Physicians Mutual, Inc.—Reference Committee No. 4.

Report of the Scientific Program Committee—Reference Committee No. 2.

Report of the Scientific Exhibits Committee—Reference Committee No. 2.

Report of the Continuing Medical Education Committee—Reference Committee No. 2.

Report of the Cancer Committee—Reference Committee No. 2.

Report of the Maternal Mortality Study Committee—Reference Committee No. 3.

Report of the Hospital Committee—Reference Committee No. 2.

Report of the Advisory Committee to Blue Cross-Blue Shield—Reference Committee No. 4, with the exception of that section entitled, "Physician Cost Awareness Plan" which is referred to Reference Committee No. 2.

Report of the Committee on Business Management and Services—Reference Committee No. 5.

Report of the Committee on Occupational Health —Reference Committee No. 3.

Report of the Committee on Health Care of the Poor—Reference Committee No. 4.

Report of the Committee on Long-Term Health Care—Reference Committee No. 5.

Report of the Physician-Attorney Liaison Committee—Reference Committee No. 3.

Report of the KMA-Kentucky Nurses Association Joint Practice Committee—Reference Committee No. 6.

Report of the Claims and Utilization Review Committee—Reference Committee No. 4.

Report of the Committee on National Legislative Activities—Reference Committee No. 3.

Report of the Committee on State Legislative Activities—Reference Committee No. 3.

Report of the Committee on Governmental Medical Services—Reference Committee No. 5.

Report of the Technical Advisory Committee on Physician Services (Title XIX)—Reference Committee No. 5.

Report of the Advisory Committee to Selective Service—Reference Committee No. 5.

Report of the Advisory Committee to Woman's Auxiliary—Reference Committee No. 1.

Report of the Committee on Community and Rural Health—Reference Committee No. 4.

Report of the Committee on Environmental Quality—Reference Committee No. 3.

Report of the KMA Liaison on Cults to the AMA —Reference Committee No. 3.

Report of the Committee on School Health, Physical Education and Medical Aspects of Sports—Reference Committee No. 4.

Report of the Committee on Public Relations—Reference Committee No. 5.

Report of the Health Manpower and Placement Services Committee—Reference Committee No. 4.

Report of the Emergency Medical Care Committee—Reference Committee No. 2.

Report of the Interspecialty Council—Reference Committee No. 2.

Report of the Committee on Physicians' Health—Reference Committee No. 3.

Report of the Committee to Study the Constitution and Bylaws—Reference Committee No. 6. At this point, the Speaker noted an editorial change was necessary in the report of the Committee to Study the Constitution and Bylaws. He thus instructed the Delegates to turn to page 43.7 of the report, on the 14th line after the comma, and add the words, "any one of" making that sentence read, "When one or more of the above-named officials are not readily available, *any one of* four specifically designated representatives of the Executive Committee is authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature." A motion was made, seconded and passed that the editorial change be accepted.

Report of the McDowell House Board of Managers—Reference Committee No. 6.

Report of the KMA Advisory Committee to KPRO—Reference Committee No. 4.

Report of the Ad Hoc Committee to Study the External Structure of KMA—Reference Committee No. 6.

New Business

New business was presented to the House by the Vice-Speaker and referred to the Reference Committee indicated:

(A) Resolution from KMA Board of Trustees concerning Combining the Offices of the KMA Secretary and Treasurer.

(B) Resolution from KMA Board of Trustees concerning Medicaid Funding—Reference Committee No. 5.

(C) Resolution from Allen County Medical Association concerning Kentucky PSRO—Reference Committee No. 4.

(D) Resolution from Allen County Medical Association concerning Kentucky PSRO—Reference ence Committee No. 3.

(Substitute E) Resolution from Daviess County Medical Society concerning Editorial Conflict of Interest—Reference Committee No. 1.

(F) Resolution from McCracken County Medical Society concerning the Method of Selecting the Nominating Committee—Reference Committee No. 6.

(G) Resolution from McCracken County Medical Society concerning Proposed Changes in the Nurse Practice Act—Reference Committee No. 6.

(H) Resolution from Shelby-Henry-Oldham Medical Society concerning Blue Cross-Blue Shield—Reference Committee No. 4.

(I) Resolution from W. Neville Caudill, M.D. concerning Non-Discovery Statute and Immunity of Medical Review Board Personnel and Records—Reference Committee No. 3.

(J) Resolution from Hardin-Larue County Medical Society concerning Specialty Representation in the KMA House of Delegates—Reference Committee No. 6.

(K) Resolution from Jefferson County Medical Society concerning Dissatisfaction with Part B of the Medicare Program—Reference Committee No. 5.

(L) Resolution from Jefferson County Medical Society concerning Public Knowledge of Physician's Contribution to the Kentucky Medical Assistance Program—Reference Committee No. 5.

(M) Resolution from Jefferson County Medical Society concerning Increased Dues for the American Medical Association—Reference Committee No. 1.

(N) Resolution from Jefferson County Medical Society concerning H.R. 2223-Copyright Law—Reference Committee No. 3.

(0) Resolution from Campbell-Kenton County Medical Society concerning Reporting Claims—Reference Committee No. 3.

(P) Resolution from Campbell-Kenton County Medical Society concerning Review of Professional Activity—Reference Committee No. 3.

(Q) Resolution from Campbell-Kenton County Medical Society concerning Punitive Damages—Reference Committee No. 3.

(R) Resolution from Campbell-Kenton County Medical Society concerning Expert Witnesses—Reference Committee No. 3.

(S) Resolution from Campbell-Kenton County Medical Society concerning Cancellation of Insurance—Reference Committee No. 3.

(T) Resolution from Fayette County Medical Society concerning Opposition to Federal Regulation Requiring All Skilled Nursing Facilities to Have a Medical Director—Reference Committee No. 5.

(U) Resolution from Fayette County Medical Society concerning Opposition to National Health Planning and Resource Development Act of 1974—Reference Committee No. 3.

(V) Resolution from Campbell-Kenton County Medical Society concerning Current KMA Policies Concerning Abortion and Euthanasia—Reference Committee No. 6.

(W) Resolution from Campbell-Kenton County Medical Society concerning Medical Liability Insurance—Reference Committee No. 3.

(X) Resolution from Robert E. Smith, M.D., concerning KMA Policy Concerning KPRO—Reference Committee No. 4.

(Y) Resolution from University of Louisville AMSA Student Government concerning Medical School Admissions Programs to Help Rectify Physician Maldistribution—Reference Committee No. 2.

(Z) Resolution from Henderson County Medical Society concerning Kentucky Medical Assistance Program—Reference Committee No. 5.

(AA) Resolution from KMA Board of Trustees concerning Council on Public Higher Education Recommendations—Reference Committee No. 2.

(BB) Resolution from KMA Board of Trustees concerning Physicians Assistants—Reference Committee No. 2.

Doctor Cooper then called an Executive Session of the House and asked Ballard W. Cassady, M.D., Chairman of the KMA Budget Committee, to proceed to the podium.

While he was doing so, the Speaker called on the KMA Parliamentarian who explained to the House that it was necessary to take a vote on Resolution A at that time. A motion was made, seconded and carried to accept and implement Resolution A, which reads as follows:

WHEREAS, the "Hoover Commission" recommended that the offices of Secretary and of Treasurer of the Kentucky Medical Association be combined when the terms of those holding those respective offices expire, and

WHEREAS, the Board of Trustees of the Kentucky Medical Association requested by resolution passed on April 10, 1975, that the Association's Parliamentarian prepare the necessary amendments to the Constitution and Bylaws to create the office of Secretary-Treasurer, and

WHEREAS, it was requested by the Board of Trustees that this resolution be mailed to the Delegates two months prior to the 1975 Kentucky Medical Association Annual Meeting in accordance with Article XII of the Constitution and with Chapter XIII, Section 1 of the Bylaws of the Kentucky Medical Association and,

WHEREAS, the Association's Parliamentarian has received the instructions of the Board of Trustees; therefore the following resolution is submitted to fulfill the intent of those instructions. Be it

RESOLVED, that the words "Secretary" and/or "Treasurer" be changed to "Secretary-Treasurer" whenever they appear in the Constitution and whenever they appear in the Bylaws of the Kentucky Medical Association, and be it further

RESOLVED, that the newly created office of Secretary-Treasurer be filled by a member of the Kentucky Medical Association who has been an active member of the Association for at least three years, and be it further

RESOLVED, that the Secretary-Treasurer be elected for a term of three years and that the Secretary-Treasurer not be eligible for election to more than two consecutive full terms.

Following the vote, Doctor Cassady briefly outlined the reasons a dues increase was being proposed for KMA members, and encouraged the House to accept and support the proposed increase.

Vice-Speaker McElvein announced the meeting places for the Nominating Committee for general officers and the trustee districts electing trustees. He stated that the Nominating Committee would report at the close of the first scientific session on Tuesday morning, as well as at the second meeting of the House on Wednesday evening. The physicians on the Nominating Committee were named as follows: John M. Baird, M.D., Danville, Chairman; Keith M. Coverdale, M.D., Bowling Green; A. B. Richards, M.D., Louisa; James C. Salato, M.D., Columbia, and James C. Seabury, M.D., Paducah.

The meeting was adjourned at 12:00 noon.

Second Session

Speaker Cooper called the second session of the House of Delegates to order at 7:30 p.m. on September 24, 1975. The invocation was given by Paul J. Parks, M.D., Bowling Green. Doctor Scott reported a quorum was present.

Doctor Parks was then recognized as Chairman of the Board to present the final report of the Board. He read the following Resolution which was passed by the Board at its September 24 meeting and moved its adoption. The motion was seconded and carried.

WHEREAS, the 1975 KMA Annual Meeting has made a substantial contribution in the field of continuing medical education and has been well received, and

WHEREAS, many individuals, organizations and agencies, including guests, and state essayists, scientific and technical exhibitors, newspapers, radio and television stations, the Ramada Inn and the Bluegrass Convention Center have contributed to its success, therefore be it

RESOLVED, that this House of Delegates go on record of expressing its deepest appreciation to all individuals and organizations who have had a part in the development and implementation of the 1975 Annual Meeting.

Doctor Scheen was then called to the podium for announcements and recognition of guests from the surrounding state medical associations who had attended KMA's Annual Session. Included were Maurice F. Lieber, M.D., President, Ohio State Medical Association; Gilbert M. Wilhelmus, M.D., President, Indiana State Medical Association; John J. Mahood, M.D., President-Elect, West Virginia State Medical Association, and Carl E. Stark, M.D., a Past President of the Medical Society of Virginia.

Doctor Cooper then personally introduced Doctor Wilhelmus, and asked him to provide the House with the details of the recent passage of a Professional Liability Insurance package through the Indiana Legislature.

The Speaker, following Doctor Wilhelmus's address, stated he would introduce the reports of Reference Committees 1, 3 and 5, and would turn the chair over to the Vice-Speaker, Doctor McElvein, for reports of Reference Committees 2, 4 and 6.

REFERENCE COMMITTEE NO. 1*

Peter P. Bosomworth, M.D., Lexington
Chairman

Reference Committee No. 1 considered the following reports and resolutions:

1. Report of the President, with the following exceptions:
   - Beginning with the last paragraph on Page 1.2 to the last paragraph on Page 1.4, all of which pertains to liability insurance—referred to Reference Committee No. 3
   - Beginning with the last paragraph on Page 1.7 to the paragraph starting with "The State Legislature . . ." on Page 1.9, pertaining to Medicare and Medicaid—referred to Reference Committee No. 5
   - Beginning with paragraph on Page 1.9 starting with "The State Legislature . . ." through the end of Page 1.10, pertaining to legislative matters—referred to Reference Committee No. 3
   - Beginning with the paragraph on Page 1.13 starting with "Another positive issue . . ." to the first full paragraph on Page 1.14 starting with "The KMA Presidents . . ."—referred to Reference Committee No. 2
   - All of Page 1.15 and the first paragraph on Page 1.16, pertaining to KEMPAC and legislative matters—referred to Reference Committee No. 3
2. Report of the President, Woman's Auxiliary to KMA
3. Report of the President-Elect
4. Report of the Speaker and Vice Speaker of the House
5. Report of the Chairman, Board of Trustees, with the following exceptions:
   - Pages 5.10-5.13, pertaining to the Ad Hoc Committee on Foreign Medical Graduates—referred to Reference Committee No. 5
   - Pages 5.13-5.16, pertaining to the Ad Hoc Committee on Professional Liability Insurance, as well as the legislative proposal you have received on liability insurance—referred to Reference Committee No. 3
   - Pages 5.16-5.18, pertaining to the Ad Hoc Committee on Peer Review Expenses—referred to Reference Committee No. 4
   - The Ad Hoc Committee on Mental Health-Mental Retardation—referred to Reference Committee No. 5
6. Report of the Secretary
7. Report of the Editor
8. Report of the Treasurer
9. Report of the Delegates to AMA
10. Report of the Executive Director

**In order to make the Digest of Proceedings of the second meeting of the House of Delegates more understandable and because it will occupy less space in The Journal, the KMA Board of Trustees passed the following motion several years ago: "that if no dissenting action on the Committee's recommendations is made either by the Committee or the KMA Board of Trustees, only the Reference Committee action on the report be printed in The Journal."*

33. Report of the Advisory Committee to the Woman's Auxiliary

Substitute Resolution E—Editorial Conflict of Interest? (Daviess County Medical Society)

Resolution M—Increased Dues for the American Medical Association (Jefferson County Medical Society)

Report of the President

You have heard of the calmness in the eye of the storm. While tranquil inside, there is chaos, confusion, disarray and destruction at the periphery. We of Kentucky Medicine and we of all of Medicine are in such a climate today. This year has been reasonably quiet despite the medical liability calamity. By looking at the circumference of our throbbing vortex of environment there is a swirling confrontation though that will not leave us in serenity or as before.

We must prepare for the certainty of the malstorm before it strikes. This brief respite allows us to become more strategically organized. We can on some issues, if we handle them well, even plan and be the initiators.

Current economic climate and other national and international issues have diverted schemers who would place all human sustenance into the mindless and mediocrity of bureaucracy. From this captivity there is rare escape for the individual or his culture.

Let's examine together the state of affairs in our country today as applied to the currents of attitudes and the dispositions which are afloat in the land as it pertains to government. At the beginning, let us inspect documentation.

There has not been an example where collectivism has equaled the accomplishments of capitalism in this country. No historical recording displays personal freedom like our system does. For the achiever, the independent, the talented, this great land has afforded wholesome and endless opportunity. From these individual successes this country has tried through an unbelievable benevolence efforts to succor the world's needs and demands. This is indeed a worthy but a highly suspect possibility for success. We have claimed as our own the universal travail. With our blood coin of the realm and compassionate muscles, we for six decades have tried to sooth the ever-fevered brow of international rancor.

Today our citizenry stands teetering on the brink of national bankruptcy while we allow free spenders, who we have elected to high offices, to buy votes by imposing more and more inefficient bureaucracy upon the back of all at a very high cost.

There is nothing magic about government because whatever kind of government exists is made possible by people and has allowed to come into being either by people's endeavors or people's apathy.

Imposed bureaucracy has not proven it can do better, cheaper or for more people. Bureaucracy has never allowed personalization. Bureaucracy is never simple. It begins by the indifferent and calloused clerk and ends with the inacessible and uncoordinated division head. To change this attitude of continuing amorphous congeal, there must be a return to self reliance and there has to be discipline in our lives and efforts. We have to encourage a self-maintenance that precludes governmental responsibility.

What can we of medicine do? At the very least, we can bring directions in our profession for our patients and in turn for everyone and in finality for our government and way of life. As the oft repeated bromide goes, "To win abroad, you must succeed at home first."

As we begin now our annual considerations, let's recall a motto expressed by Doctor Norman Vincent Peale in a most succinct way, "If you think it can be done, it can."

We must now assess the needs for dues increase and unified membership. Organizations are the manifestations as their membership wants them to be. They can be expressed by numbers and by the amount of money available, or exhibited by the knowledge and endeavors of the membership and by the acuity and continuity of an organization's staff. All of these together bring a recognition of the organization as it is perceived by the rest of the outside world and from this image comes whatever credibilities and acceptabilities that is afforded to it by others.

We have much to be positive about. There are 26 positive reasons which place us in the position of proud members and possessors of one of the original four learned professions. What are these attributes?

1) We are the most educated.

2) We take care of the entire population.

3) We do more postgraduate experiences.

4) We are the most communicated with, both from inside and outside the profession.

5) Even today, we are the most highly heralded profession in public opinion polls.

6) We are still among the lowest percentages in the amount of dues paid and are the lowest when based on dues paid per individual income ratio.

7) We are the most complex profession.

8) We are the most highly organized of the learned professions.

9) We are the most self-policed and self-disciplined of any group.

10) We are involved in all areas of health care delivery, both nationally and internationally.

11) We are the zealous protectors for the individual member's responsible independence.

12) We are the most politically active of any national professional organization and have by far the largest number of voluntary dues-paying members.

13) We buy more scientific equipment per individual.

14) We consume more scientific literature and information.

15) We have the largest number of members in 1974 than in history.

16) More physicians are now being graduated each year than ever before.

17) We have more postgraduate courses available.

18) More patient care is insured for larger amounts under the voluntary insurance system.

19) More mechanisms of treatment and more armoratorium of patient care is now available than previously.

20) There is more quality health care available in this nation than ever before accounted.

21) There are more students in pre-medical education.

22) There are larger numbers of health ancillary professionals working than in the past.

23) We have more staff people doing more work in more areas.

24) We have more people living to an old age.

25) More money from all areas is being spent in the health arena.

26) We are the most affluent profession in the most affluent time in the most affluent country in history.

We can no longer be microcosmic in our organizational concepts, and we must abandon wheel and sail resolutions in this atomic space age. Any issue, even a grass-roots one, has its effect at all levels and must be so dealt with.

Any one element of organized medicine will fall and become rapidly extinct if the other two do not exist. Each group, county, state or national, has unique purposes to serve that the other two cannot undertake or maintain. None of these however, are possible without the interstructures of all working together. We do not live in a county, city or nation. We live, for example, in Louisville, Kentucky, United States of America.

Our dues structure of county, state and American Medical Association has been unfortunately separated in past history. You cannot be a part-time citizen of one area and then another. You cannot have partial services just for that moment's needs. You cannot have a sometimes existence today, nothing tomorrow and an appeal mechanism next week. There has to be a universal and broad umbrella in all areas from which we all can maintain ourselves in proficiency, in order and in strength. If these are all self-evident facts and they are, then a unified cost is necessary, appropriate and indeed imperative. It also seems right, proper, just and honorable for everyone to pay his fair share because the benefits are shared by all. The financial burden helps make our credibility possible, it makes the acceptability possible, it makes education possible, it makes strengths possible, it can no longer be defended that we are any less than co-partners or equal participators in the profession. It is only right that all pay equal shares for the successes and for the purposes.

Our accountability goes through many sieves, adjustments and evaluations before our dollars are expended. There have not been enough dollars in the past for us to have completely expanded programs. Unfortunately, despite widely available information of how our expenditures have flowed, few have paid enough attention to appreciate needs for greater fiscal support. There have been untold opportunities which passed us because we did not have the money at the time to claim the moment for success.

This year's presidential recommendation is for acceptance of the proposed dues structure and unified membership dues—county, state and national. This is out of fairness to all and fairness from all. There is more than ample justification for each and every one to bear his equal share.

There are some at-home responsibilities with which we must deal. We must have better coordination with our larger county societies. Such can be aligned by liaison or by ad hoc committees. There is much more to be achieved by having closer mutual relations and undertakings. Each represents a small world within a larger universe and a periodic trustees' report, while helpful, is not adequate for organizational strengths and performances. Our biggest deficiencies are in communications. You cannot overcome these successfully unless there is information distributed in both directions as to what are our purposes, programs and policies. The individual physician must no longer be able to claim the haven of refuge by saying he has not been informed. He should only be able to concede that he has not taken the effort to adequately inform himself from the great magnitudes of information sent his way.

It is recommended that there be appointed to the larger societies liaison and appropriate ad hoc committees with specific assignment to carry back or forth on a frequent and continuing basis those issues demanding focus and attention at that on-going time.

In relationship with smaller county societies, it now is apparent, imperative and obvious that we must work more avidly with our basic physician strengths in the outreaches. These men and women oftentimes are alone and are widely spaced from their colleagues. Physicians practicing in smaller areas do not have the opportunities and functions that larger societies make available. There are possible solutions that will act as antidote to some of these voids. We should act to help the smaller counties that are so inclined to amalgamate into a larger sector. This will aid continuing medical education programs, it will provide organizational strength, it will bring a companionship not currently present and this will develop a leadership that will serve all to KMA level and beyond. The KMA must be a continuing focus, an initiator to get these started, to continue to strengthen them once they are in existence and to aid and offer such services and programs as will be beneficial in support of these amalgamations. It is therefore recommended that a special committee be appointed by the Board of Trustees dealing with problems in the organizational function of the small county society.

Let us now look to an expanding relationship with the Woman's Auxiliary. There are growing numbers of women who have become particularly informed and are especially interested in some of our issues. There is no assigned structure in our organizational programs where they can fully participate, yet they are as exceptionally well-qualified to serve as any of us. To allow them to serve would increase strengths and capacities.

It is recommended that dues-paying membership of the Auxiliary that have these special areas of expertise and motivation and interest be so appointed to full KMA committees and responsibilities of leadership, and be allowed all the privileges thereto appending.

We must work more with the Auxiliary. It has been too obvious only a very small number have any

comprehension of many of our crucial issues and even smaller numbers know how to proceed to help us. There is a large number who are willing to devote extensive time and effort when they get encouragement from us.

We need also to promote the Auxiliary to become more self-supporting financially. Their dues structure is unbelievably low and totally unrealistic to undertake programs with significant survival. What has been said for our dues structure is equally true for theirs. Our direct interface with the Auxiliary for advice and counsel should be enlarged, even though there may be some resistance. It is an appropriate effort and gesture to be sought by us and offered to them.

We have a remarkably wonderful relationship with many allies in the state and yet on an individual basis, while we do well, there is no cohesiveness that brings all together often enough that we may share the opportunities offered by each other's successes and the possibilities to assist each other toward common realizations. Such groups as Blue Shield, Chamber of Commerce, Farm Bureau, Associated Industries, Kentucky Hospital Association, Kentucky Dental Association, friendly legislators and friendly bureaucrats can all benefit by once or twice a year round table discussions with each area submitting items for an agenda. There should then be open and community discussion and participation. This would be with friends and not undertaken as many ideas in the past where the mass or mess was too great to be consumed.

There has to be an igniting and propulsive force to call such collectivity. It is recommended that the Kentucky Medical Association act as the beginning catalyst on at least a once a year basis, or as would later be deemed necessary to bring these above and other pertinent groups to at least a once a year seminar.

The Kentucky Medical Association Presidents have made efforts to meet and always to work with our two medical schools' faculties and students. It has sometimes been a rather haphazard arrangement; perhaps has not always been pursued with vigor and perseverance. It would be beneficial that at least the Executive Committee, or perhaps the entire Board on occasion, in addition to KMA President, meet with representatives of the University of Louisville and University of Kentucky schools of medicine and also meet with appropriate leadership of the medical students. While this will cause more meetings, it will give a more meaningful experience for us and a better association, understanding and more opportunities to work together.

The interns and residents represent an entirely different problem in Kentucky, and it has not been possible so far to discern much enthusiasm in any sector of the interns and residents to become active in our affairs. We should always stay ready to invite and include them at any time this kind of leadership surfaces.

The Board of Medical Licensure has adopted a new regulation reducing the endorsement fee for accepting University of Kentucky and University of Louisville Medical School graduates who have taken the National Board of Medical Examiners' examination from $125 to $65.

The purpose of the reduction is to bring into line the cost of becoming licensed in Kentucky by the National Board route and encourage our medical graduates to remain in the state. This is presented for informational purposes per the request of the House of Delegates last year in approving Resolution N.

We have, as in all years, a special project this year. Five counties across our state from East to West were selected to see the possibilities of an audience. Appropriate programs based on research of their needs, wants and desires were used in bringing a program to them. Such was done and almost 1200 doctors and their wives were in the attendance.

We must always carry our KMA services and efforts on a seek-out basis to the physicians in the field. We must always be sure to make KMA presence a part of each physician's empire. To bring the alert, the access, the knowledge to the hinter lands of our functions and abilities.

Therefore, it is recommended on a continuing basis from year to year that special prudent presentations be made to cities and areas across the state on a rotational basis that will eventually include all dominions of medical societies or groups scheduled to stress such programs and continuing needs. These would purposefully alert and prepare physicians and friends to any crisis of the moment. These formats would utilize the best of state and national speakers.

Now we turn to the deliberations and transitions that will provide the progress that the coming year is sure to bring. But as we do so, we are today challenged to remember that as pollution of air restricts our vital breathing capacities, so do the pollutions of bureaucracy and legislation constrain our liberties. We must contest to see that in neither area we are smothered or extinguished.

And now the song is sung. There are colleagues to thank for the abetment and sustainment for a year's activity. Such service would be unobserved or inconsequential if a multitude did not support and nourish the undertakings.

My unlimited thanks to Bobby Cox and his noteworthies, Armstrong, Applegate, Mahoney, Klinglesmith, Schmidt and now Ledford. No state surpasses us in Kentucky in staff expertise, and in their downright goodness and dedication. Our office secretaries are excellent and do a profusion of helpful instances in a most pleasant and cogent manner.

The Board of Trustees was diligent and courageous. They attended meetings with regularity and were always professional and serious in their considerations and decisions. The Executive Committee members were stalwarts all, and always stood at the ready.

Paul Parks as Chairman of the Board gave leadership and a sense of direction which never failed to be proper, strengthening and gracious.

A particular salute to Fred Rainey, Immediate Past President, who despite miles, winter and often the briefest of notification, filled commitments.

Laszlo Makk was a complete backup and underpinning who worked hard and attended all meetings and many national functions. One could have had no better Vice-President.

Dave Hull, President-Elect supported, counseled and complemented this year with wisdom and grace.

To the many who have tread the snows and the sands of the helmsmanship of our organization in the past are due everlasting appreciation for it was from their foundations, pillars and bracings that made this year's continuation have reality and flesh.

A special toast to the doctors and wives who by their toils, their beliefs and their steadfastness of purpose come the real nourishment that makes our organization the responsible force it is. They must always be remembered for it is they who give us life.

From a personal point of view, this honor of position and privilege of service shapes a debt to you I could never resolve. Your solicitations always will receive anything you shall request of me. Your deeds of support shall reside with me forever in eternal gratitude.

Hoyt D. Gardner, M.D., President

Recommendations, Reference Committee No. 1

Reference Committee No. 1 has reviewed the Report of the President completely. We wish to commend him for a comprehensive report and for his excellent service to the membership of the Kentucky Medical Association. His extensive participation in bringing information, issues of concern and plans for action to organized medicine has been superb.

With reference to the President's recommendation on a dues increase, the Committee has considered, in addition, the Report of the Chairman of the Board of Trustees on this matter. The Committee heard no testimony in opposition to the dues increase. The President, Board of Trustees and several component society representatives spoke in favor of the increase. Mr. Chairman, the Committee recommends approval of that portion of the President's Report and that portion of the Chairman of the Board of Trustees Report dealing with the dues increase and additionally recommends approval and implementation of that portion of the Board of Trustees Report which requires a Bylaws change, which reads as follows:

"Proposed Section 1, Chapter IX. Assessments and Expenditures:

The annual dues for membership in this Association shall be as follows: (1) Active Members, $225; (2) Emeritus Members, no dues; (3) Associate Members, $25; (4) In-Training Members, $20; (5) Inactive Members, $25 (6) Student Members, $10; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on the basis of the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of Delegates, and list of non-affiliated physicians of the county to the Secretary of this Association as of the first day of January of each year."

Mr. Speaker, your Reference Committee moves the adoption and implementation of this section of the report.

The motion was seconded and carried.

Your Committee considered the portion of the President's Report dealing with unified membership. The President's Report recommends acceptance of unified membership dues—county, state and national. Testimony in support of and in opposition to this proposal was heard by the Reference Committee. In order to allow full consideration of a necessary Bylaws change which would be deliberated and voted upon at the 1976 House of Delegates meeting, the Reference Committee recommends that the President's Report recommending unified membership be approved in principle and referred to the Committee on Constitution and Bylaws who will draft the necessary Bylaws changes for consideration.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded from the floor.

At this point, the Speaker recognized the Chairman of the KMA Board of Trustees, Paul J. Parks, M.D. Doctor Parks stated the Board had unanimously endorsed the concept of unified membership.

W. Eugene Sloan, M.D., Paducah, was then recognized from the floor and read a Resolution supporting unified membership that had been discussed by the Board and moved its acceptance. The motion was seconded by Wally Montgomery, M.D., Paducah.

An amendment was then made to Doctor Sloan's motion that the House instruct the Committee to Study the Constitution and Bylaws to draft the necessary changes in the Bylaws to implement the Resolution. The motion to amend was seconded from the floor.

Thomas L. Heavern, Jr., M.D., Highland Heights, was then given the floor and stated that since the Resolution had been introduced by an individual member, action on it had to be postponed.

Doctor Sloan then withdrew his motion and the amendment to the motion was subsequently withdrawn.

David Crowder, M.D., Hopkinsville, then made a motion that the report of Reference Committee No. 1 be amended on lines 14 and 15 on page 3 by deleting the words, "approved in principle." The motion was seconded and passed by a 96 to 48 vote.

The Chairman of Reference Committee No. 1 then moved for adoption and implementation of the above section of the report. The motion was seconded, and on a call for the vote, it passed 84 to 71.

The remainder of the President's Report assigned to Reference Committee No. 1 was reviewed.

Mr. Speaker, I move the adoption of this portion of the report.

The motion was seconded and carried.

Report of the KMA Woman's Auxiliary

One year ago at my inauguration as President, the members of the Woman's Auxiliary to the Kentucky Medical Association were asked to "Reach for the Stars". In this annual report, I am pleased to relate many achievements.

We have a record membership of 1,452 women, representing the desire of an increasing number of women to participate in our activities, in which our first stated objective is to support and assist the Kentucky Medical Association in advancing medical and health education. While most of this number belong to one of our 28 organized county auxiliaries, 106 women are members-at-large, living where there is no organized group. Three of our components are new this year, in Mason, Barren and Woodford counties. In June, at the annual American Medical Association Auxiliary convention, we were presented with four Certificates of Merit in membership, as well as a $100 award for our successful and innovative program to recruit members-at-large.

Since we believe that knowledge of the political and legislative problems facing physicians today is a practical necessity for all MD's wives, we held a series of four informative seminars across the state, entitled "Medical Legislation Today, Past, Present and Future". Our members were invited to participate in these and they were also urged to attend one of President Doctor Hoyt D. Gardner's "Medical Critical Dimensions, 1975". We also sent information about both of these opportunities to those women who have not joined us, but are potential members-at-large.

The Auxiliary was engaged during June, in a LEGS Alert, a pyramid system of informing our members of legislation which we feel is of immediate importance to organized medicine. Once they are contacted, and informed of the issue at hand, they are urged to write to the appropriate legislator, starting their approval or opposition to the measure being considered. This LEGS Alert was prompted by the proposed passage of the federal bill, HR 5546.

Interest in political activity was of such importance among our members, that Kentucky won an award this year from AMPAC for third place in the 1974 "Total Women Membership Award".

We donated to the American Medical Association Education and Research Foundation a record $13,863.09 this year. More than half of this money came from Auxiliary members, through various fund-raising efforts, and the balance came from you physicians as donations to the medical school of your choice. Aside from loans to students, interns and residents, a direct benefit from this supportive activity can be seen in the gift of unrestricted funds to the deans of our two medical schools, amounting to $7,051.92 to the University of Louisville School of Medicine and $4,386.48 to the University of Kentucky School of Medicine.

Our second stated objective as the Woman's Auxiliary to the Kentucky Medical Association, is to coordinate and advise concerning the activities of component auxiliaries. Sales and Use Tax problems were recognized at the state level, thus a thrust was made this year to acquaint all of our members of their appropriate tax responsibilities. This is a necessity, as our county members annually raise over $25,000 to give to loan and scholarship programs for nurses and other allied health career students. Also, they raise some $2,000 to donate to local charitable organizations such as children's homes, medical supply loan closets and even, to provide equipment needed by their local hospitals such as inhalation therapy machines.

Another source of scholarship loan money is derived from the annual $4 dues paid by every member of the Woman's Auxiliary to the Kentucky Medical Association. From this, $1 goes immediately to the state Health Career Loan Fund. Currently we have eight graduates, repaying their loans, ten students in school and another six will receive funds to start their careers this fall.

All of the activities of our members such as: Meals-on-Wheels, a march to raise money for a nursing school, operating a hospital gift shop, training baby-sitters, laying out a safe bicycle path, cooperating with the Kidney Foundation to promote the Uniform Donor Act, collecting material for the International Book Project, financially assisting McDowell House, screening for eye-defects, aiding in a pediatric heart clinic, and many others too numerous to mention, have an intrinsic value. Additionally, the support of these beneficial public programs by physician's wives as individuals and as representatives of organized medicine, demonstrates our concern for and desire to improve the quality of life.

Aside from internal tax and audit problems, my responsibilities this year have included the planning of our post and pre-convention board meetings, the 1975 Annual Convention, a Fall Board Meeting at Rough River and a Spring Board Meeting at Natural Bridge. These fall and spring meetings were geographically located to provide maximum opportunity for all of our members, to get to know one another and to increase their mutual understanding, our third stated objective.

Within the state, I have traveled over 8,000 miles, attending committee and board meetings; visiting 18 county auxiliaries; 3 auxiliary regional meetings; 5 Medical Association District Trustee meetings; and 4 of the 5 "Medical Critical Dimension, 1975" programs. Also, I attended a two-day conference on "Operation Independence", an off-shoot of the National Council on the Ageing, as well as an Advisory Committee Meeting for "Health Careers in Kentucky". Also, I represented your auxiliary by attending the President, President-Elect Conference in Chicago and the Southern Regional Workshop in New Orleans, both conducted by the American Medical Association Auxiliary. In addition, I was in attendance

at the Annual Meeting of the Woman's Auxiliary to the Virginia Medical Association in Williamsburg and the 1975 American Medical Association Auxiliary Convention in Atlantic City.

Our bylaws have been reviewed, and during our house-of-delegates session tomorrow, we will consider some minor and major changes, the most important of which, would conform with a one-year-old amendment of American Medical Association Auxiliary bylaws. Five other states have already taken this action.

Our desire is to be responsive to your requests and flexible enough to reflect your varying needs. It has been my privilege to be the President of your Auxiliary during the past year as the members worked to serve you. We are deeply appreciative of all the assistance given us by your staff and also of the financial support pledged to us. Thank you.

Mrs. Richard B. McElvein, President

Recommendations, Reference Committee No. 1

The Report of the President, Woman's Auxiliary to KMA has been reviewed. We would like to commend the Auxiliary for their accomplishments in increasing membership, increasing scholarships, and other public oriented activities related to health. We congratulate the Woman's Auxiliary and commend their President on accomplishments of the past year and express gratitude for help given to KMA.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the President-Elect

The concept of the President-Elect has been used to allow the President-Elect to take a more active role in the affairs of the Association during the year prior to his assuming the presidency. This idea, in my opinion, is worthwhile and has provided an opportunity for me to deal on a daily basis with many problems which we may face in the years ahead.

Also, I feel that the President-Elect serving as Chairman of the Committee on National Legislative Activities is extremely worthwhile. The President-Elect has, by virtue of this chairmanship, an opportunity to become more conversant with the Washington scene and national legislation, which has become extremely important to all of us in the practice of medicine.

Having had the opportunity to serve as a Trustee and as Chairman of the Board of Trustees of KMA, I was rather intimately aware, prior to this year, of many of the problems that face us. Certainly, I do not need to enumerate these problems because they will be covered in depth by the reports of the many committees which have functioned so effectively in our behalf during the 1974-75 Associational year.

I would only take this opportunity to add my thanks to the other officers, Board members and committee members of this Association who have toiled diligently on behalf of medicine in Kentucky. Certainly, no committee or committee chairman has worked any harder than those who have been involved with the Ad Hoc Committee on Professional Liability Insurance. I laud their efforts and urge you to study with interest the proposals which they have made for helping to solve this massive problem.

I look forward to 1975-76 with anticipation, with pride that you have given me an opportunity to serve as President of this fine organization and with deep concern in the knowledge that we must attempt to work together to solve the problems that are facing us in the year ahead. I pledge to you that it will be my intention to give as much time as possible to performing the duties which are inherent to the presidency of KMA. I urge all of you to provide the support, dedication and effort that will be needed on the part of every Kentucky physician if we are to continue to well serve the physician, the profession and the public.

David A. Hull, M.D., President-Elect

Recommendations, Reference Committee No. 1

The Report of the President-Elect has been reviewed and the Committee wishes to extend to Doctor Hull its best wishes for a successful term in office.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Speaker and Vice-Speaker, House of Delegates

As Speaker and Vice-Speaker of the House, we would like to take this opportunity to thank you for this privilege.

We will attempt to perform our duties with fairness and efficiency and we beg of you to please assist us. We do not want to get bogged down in parliamentary procedure other than as a means to orderly progress.

In review of the work done by the House of Delegates, Reference Committees and reporting Chairmen of last year, let us say thanks to all, and let us strive to do as well this year.

You will recall that the House of Delegates requested that the Speaker and Vice-Speaker attend programs or courses in parliamentary procedure. Your Speaker, as Vice-Speaker, attended two seminars for parliamentarians and will continue to try to keep current with parliamentary procedure. I will urge the present Vice-Speaker to do likewise.

We will appreciate any suggestions you may have to help expedite and simplify the procedures of the House of Delegates.

In closing this report, please allow me to again thank Doctor Richard Greathouse for his service as Speaker of the House and for a job well done.

Carl Cooper, Jr., M.D., Speaker
Richard B. McElvein, M.D., Vice-Speaker

Recommendations, Reference Committee No. 1

The Report of the Speaker and Vice-Speaker of the House has been reviewed.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Chairman of the Board of Trustees

With this report I complete six years (two full terms) of service on your Board of Trustees. This is the maximum allowed by our Bylaws; and I think it is a good idea, not only to keep your Board members from becoming thoroughly exhausted, but also to give others an opportunity to really learn what their Kentucky Medical Association is all about.

As I bow out as a Trustee and as your Chairman, let me assure you that KMA is active, viable, productive, a beehive of activity, doing good for all Kentucky physicians.

Some members get aggravated when a major problem arises, such as liability insurance, that KMA does not solve it overnight. There are some who think other organizations, such as unions, would be more effective. Another organization **might** be more effective if it zeroed in on just **one** problem like liability insurance, or an organization on PSRO, or an organization on continuing medical education, or an organization on ethics, or an organization on self policing, or an organization on licensing and relicensure, or an organization on legislative activities (state and national), or an organization on conventions such as we are having September 21-25, or an organization on hospital and allied group relations, or a public relations firm, *ad infinitum.*

The point I am making is that Organized Medicine, through our county society, KMA and the AMA must do all of the above and other things, and must do them properly and timely. They will always be the only true organizations serving the individual physician, the profession and the public.

KMA strives to implement policy on behalf of the "grass roots" physicians. I urge physicians to participate in their county society and KMA at every opportunity because it is only through participation that you can start to get the feel of what is really being done for you . . . things that affect your practice and life daily.

Ours is a great profession. Many physicians become active out of a sense of responsibility ("I owe it back"); many because of a desire to see ideas become reality, and occasionally others who accept the challenge of becoming involved to see and be a part of "the action" or to influence from within rather than gripe from the outside.

No matter how they become involved, however, the physicians serving on the many committees of KMA, the Board of Trustees, Executive Committee, Governor-appointed councils and liaison to other groups do so with considerable loss of time from their office and at their own expense. My personal gratitude is extended to each one for his contributions.

You, Doctor, have a job to do. I personally feel every physician has an **opportunity** that goes with a strong **responsibility** to participate actively in organized medicine. The KMA is an organization of physicians. You are a part of the whole, and successful ventures have to be related to individual members' involvement.

The Board and Executive Committee met a total of 13 times this year, three of these being two-day sessions. Support your Board members. These are frustrating times and they are diligently working in your behalf. We don't all agree on the same solutions to all the problems we face. We think independently as we are trained to do. Yet, we **must** be united together in a strong organization and have the faith that decisions are usually made by a group with more information available to them than to us as individuals.

I thank you for the privilege of serving as the Chairman of your Board and my deep gratitude is again expressed to you, the hard-working members of that Board, and to our excellent staff who so adequately do research and make arrangements for all our meetings.

The following report is a brief summary of the Board's activity during this past Associational year. The full Minutes of the Board and the Executive Committee meetings are in the hands of your Reference Committee. In addition to the above, our other policy-making group, the Quick Action Committee, has met on an almost continuing basis.

Following the summary of the Board meetings will be the Reports of the Ad Hoc Committee of the Board and the Report of the Budget Committee. The Board of Trustees, following the Budget Committee's Report, recommended the adoption of the dues increase and the Bylaws change to implement such will follow later in this report.

First Meeting, September 26, 1974

Acting as temporary Chairman, KMA Secretary, S. Randolph Scheen, M.D., introduced the newly elected members of the Board as follows:

Richard B. McElvein, M.D., Lexington, Vice-Speaker, House of Delegates
Laszlo Makk, M.D., Louisville, Vice-President
Frank R. Pitzer, M.D., Hopkinsville, Third District Trustee
Charles B. Spalding, M.D., Bardstown, Fourth District Trustee
Richard J. Menke, M.D., Covington, Eighth District Trustee
James B. Holloway, Jr., M.D., Lexington, Tenth District Trustee
William T. Watkins, M.D., Somerset, Twelfth District Trustee
Jerry D. Fraim, M.D., Paintsville, Fourteenth District Trustee

The Board then elected the Executive Committee members to serve with the President, President-Elect, Vice-President and Secretary for the 1974-75 Associational year. Chosen as Board Chairman was Paul J. Parks, M.D., Bowling Green, and Vice-Chairman, Edward N. Maxwell, M.D., Louisville. Harold L. Bushey, M.D., Barbourville, and John P. Stewart, M.D., Frankfort were also named to the Executive Committee to represent the Board of Trustees.

Elected to serve on the Board of Directors of the Kentucky Foundation for Medical Care were John P. Stewart, M.D., Frankfort; W. Eugene Sloan, M.D., Paducah; Ballard W. Cassady, M.D., Pikeville, and Lee C. Hess, M.D., Florence.

The following were then installed as officers of the KFMC: Ballard W. Cassady, M.D., President; Joseph P. Hamburg, M.D., Lexington, Vice-President; Edward N. Maxwell, M.D., Louisville, Secretary, and Lee C. Hess, M.D., Treasurer.

Robert M. Deweese, M.D., Louisville, was named as a replacement on the KEMPAC Board for the Third Congressional District.

The Board reviewed and held lengthy discussions on appointment of members to KMA Committees for the 1974-75 Associational year.

It was the consensus of the Board members that staff should discuss with the Executive Committee or Quick Action Committee the advisability of again holding another Annual Meeting at the Ramada Inn Bluegrass Convention Center.

Before adjourning, the Chairman set the date of the next Board of Trustees meeting as December 12, 1974, at the KMA Headquarters Building in Louisville.

Second Meeting, December 12, 1974

The second regular session of the KMA Board of Trustees was held on December 12, 1974, at the Headquarters Office. The President's Report and Headquarters Office Report were reviewed and accepted for information.

Reports on liability insurance and the utilization review regulations with regard to the KPRO grant application for a conditional PSRO were revieved. In a related matter, the Board authorized its approval of the Claims and Utilization Review Committee's peer review guidelines.

Various committee appointments were made and a report was given by the Medical Education Committee in regard to CME implementation and the Conference on Medical Education scheduled for February 7 and 8.

The Committee on Business Management and Services reported on the upgrading of Blue Cross-Blue Shield Group Programs for KMA members and the possibility of a group travel program for the AMA Clinical Convention in Hawaii. The Board recommended that a poll be taken to find out the desires of individual members concerning these items.

A recommendation by the Committee on National Legislative Activities regarding a change in the Washington Dinner policy concerning finances and invitations was reviewed.

KMA's policy on National Health Insurance was reviewed and the Board approved certain basic points as outlined:

1) Comprehensive basic and catastrophic coverage for all Americans at the least possible cost;
2) Funding through federal, state and private funds;
3) Minimum federal funding and minimum federal administration;
4) Cost-sharing by participants through employer-employee contributions and individual tax credits, as applied for full health care protection;
5) Use of private insurance on risk and underwriting basis;
6) Pluralism in methods of health care delivery; and
7) Continuity and coordination of benefits.

The Board also heard reports from the Committee on Public Relations concerning the upcoming Seminars for Office Assistants, the Cancer Committee concerning its 1974 report to the House of Delegates and the Interspecialty Council concerning its future continuing education activities.

A recommendation by the Hospital Committee that the dry-run program not be expanded to include hospitals seeking recertification was accepted. Approval was also given for KMA to work with the Department for Human Resources in visiting hospitals seeking services under Title XVIII and Title XIX.

The Committee on Community and Rural Health was given permission to co-sponsor a seminar on alcoholism in November.

The next meeting of the Board was set for April 10, 1975.

Third Meeting, April 9-10, 1975

The KMA Board of Trustees met on April 9-10, 1975, at the Headquarters Office in Louisville. The President's Report and Headquarters Office Report were reviewed and accepted for information at the start of the meeting.

Reports on utilization review regulations, health maintenance organization regulations and liability insurance were also reviewed and accepted for information.

The budget for fiscal year 1975-76 was approved as recommended by the Executive Committee, with the exception that funds were included for KMA participation in Health Careers in Kentucky.

The Board unanimously approved the "Five-Year Dues Plan" as recommended by the Budget Committee and recommended its approval to the House of Delegates. (The dues plan will be published in the July *Journal*.)

W. Neville Caudill, M.D., Louisville, reported on the activities of the Kentucky Peer Review Organization and noted that primary emphasis at this time was on submission of a grant application for conditional designation as a statewide PSRO.

A lengthy discussion was held concerning a petition for a special-called meeting of the House of Delegates. Based on the results of a survey taken of all Delegates, the Board supported the suggestion of KMA President Hoyt D. Gardner, M.D., not to call a special meeting of the House but rather to hold a Task Force Hearing on Professional Liability Insurance for all members. (This meeting was set for June 5 at the Breckinridge Inn in Louisville.)

William P. McElwain, M.D., Commissioner for Health Services, and Mr. C. Leslie Dawson, Secretary of the Department for Human Resources, discussed various facets and problems of the Title XIX Program.

The Board nominated a number of physicians to serve on several state councils and boards and forwarded them to the Governor for appointment.

Committee action and recommendations to the Board were as follows:

1) **Health Manpower and Placement Services Committee** recommended that support be given to increase the number of first year primary care residency positions.

2) **Business Management and Services Committee** reported on negotiations with Blue Cross and Blue Shield on group contract options and on group travel plans for the AMA Clinical Meeting in Hawaii.

3) **State Legislative Activities Committee** reported on meetings attended by the Chairman which concerned legislative proposals for the next General Assembly. Discussion was held on changes proposed by the Kentucky Nurses Association in the Nurse Practice Act and the Board requested the Legislative Committee to oppose these changes which would allow registered nurses, in effect, to make diagnoses and prescribe therapy.

4) **National Legislative Activities Committee** recommended and received endorsement of the AMA National Health Insurance bill which will soon go before Congress.

5) **Public Relations Committee** reported on the Office Assistants Seminars held this year and the "New Physician's Workshop" set for April 22 and 23.

6) **Emergency Health Care Committee** announced the Fifth Annual Emergency Health Care Seminar was set for June 4 and 5 at the Executive West Hotel in Louisville.

7) **Medical Education Committee** recommended continuing education requirements by specialty to the Board of Medical Licensure for mandatory CME.

8) **Committee on Environmental Quality** recommended that it be allowed to serve in an advisory capacity to the Department of Natural Resources and Environmental Protection.

The date of the next meeting of the KMA Board of Trustees was set for August 7 at the KMA Headquarters Office.

Fourth Meeting, August 6-7, 1975

A major purpose of the August Board meeting is to review the committee reports prior to their being submitted to the House of Delegates, and record the actions of the Board on each report for House consideration. Committee Chairmen and Trustees discussed all reports in considerable detail. We additionally heard reports from the President, Secretary, Delegates to the AMA and a PSRO update.

Two major matters were discussed by the Board. Following a five-hour session between our Title XIX Chairman, the Medicaid Projections Subcommittee and our representative on the Governor's Advisory Council on Title XIX, the Executive Committee discussed the Medicaid Program for two and one-half hours followed by a two-hour discussion by the Board and the Medicaid official. All of this happened on one day, August 6, with a re-discussion following the next day.

The second item of major concern discussed was liability insurance, and proposals presented by KMA and approved by the Executive Committee were reviewed by those in attendance. Plans were also made for transmitting these proposals to the members of the House of Delegates in legislative language. It was emphasized they are currently merely proposals (suggestions, ideas, etc.) as we must maintain some flexibility on this issue, and introduce our most pertinent legislation at the proper time.

Other action taken related to proposed changes in the Nurse Practice Act sent to us for review by the Kentucky Nurses Association, changes in the KMA-Kentucky Bar Association Interprofessional Code and an informational item concerning a meeting between the Executive Committee and officers of the Kentucky Podiatry Association.

Plans concerning KMA's continuing medical education program were considered both from a committee viewpoint and that of the Kentucky Board of Medical Licensure. The July 1, 1975 starting date for the program has been delayed until January 1, 1976.

In other action during the two-day session, final plans were set for the 1975 Annual Meeting and a nomination for the KMA Judicial Council was selected for presentation to the House of Delegates. A full report was also presented by the Budget Committee Chairman on the KMA dues increase plan, which again received full support of the Board.

A specific recommendation that is being brought to the House of Delegates for action relates to liability insurance. The Board of Trustees requested the Public Relations Committee to determine means of informing the public of the severity of the liability insurance problem. Articles have appeared in newspapers and officers of KMA have been on radio and television to assist in this endeavor. The Public Relations Committee has met with a public relations firm to determine the cost of appropriately getting information to the general public on the severity of the liability insurance problem and its effect on the public. To proceed with such plans through a commercial public relations firm would require finances not now available to KMA. For that reason, "The Board proposes to the House of Delegates that an assessment up to $50 be levied this Fall (October, 1975) to be used for the purpose of a campaign to help pass our medical liability insurance proposal with the Board of Trustees determining the method (how and when) the money would be spent." We ask that the House make specific action on this request.

As mentioned earlier, the Executive Committee meets most often and carries a heavy burden for KMA. There is no way I can even summarize all of the activities, but again reiterate that the full Minutes of the Board and Executive Committee are available to the Reference Committee and to members of the House through the Reference Committee for review.

The fifth and final session planned for the Board of Trustees for this Associational year is Sunday, September 21, and I again wish to express my gratitude to the busy Chairmen and members of the Ad

Hoc Committees of the Board. All of their reports follow with the exception of the Ad Hoc Committee on Mental Health-Mental Retardation. The original report was reviewed by the Board and some changes appeared indicated which could not be made in time to put in your reports booklet. However, that report will be sent to you separately as soon as it is available.

Many hours of intense work were put in by your capable Budget Committee. Their report, **unanimously** approved by the Board of Trustees, is attached with other supporting articles that were printed in the July *Journal.**

To implement the Report of the Budget Committee, it is necessary to change the Bylaws since our dues are recorded in the Bylaws.

The Board's unanimous approval of the Budget Committee's Report constitutes a recommendation to you that the present Chapter IX, Section 1, be changed as proposed below with the only change being the amount of dues for Active Members:

Chapter IX. Assessments and Expenditures

Present Section 1: The annual dues for membership in this Association shall be as follows: (1) Active Members, $130; (2) Emeritus Members, no dues; (3) Associate Members, $25; (4) In-Training Members, $20; (5) Inactive Members, $25; (6) Student Members, $10; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on the basis of the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of Delegates, and list of non-affiliated physicians of the county to the Secretary of this Association as of the first day of January of each year.

Proposed Section 1: The annual dues for membership in this Association shall be as follows: (1) Active Members, $225; (2) Emeritus Members, no dues; (3) Associate Members, $25; (4) In-Training Members, $20; (5) Inactive Members, $25; (6) Student Members, $10; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on the basis of the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of Delegates, and list of non-affiliated physicians of the county to the Secretary of this Association as of the first day of January of each year.

* *The Report of the Budget Committee, as well as a special article, "Financing the Future," written by Paul J. Parks, M.D., were printed in the July issue of The Journal and copies are available on request.*

It has been a pleasure serving as your Board Chairman and your support has been appreciated.

Paul J. Parks, M.D., Chairman, Board of Trustees

Recommendations, Reference Committee No. 1

The Report of the Chairman of the Board of Trustees with the aforementioned exceptions was reviewed by the Reference Committee. The Reference Committee recommends approval of the Board of Trustees recommendation of an assessment of up to $50 to be levied in October of 1975 to be used for the purpose of supporting passage of the medical liability insurance proposal, with the Board of Trustees determining the method (how and when) the money will be spent.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

The Reference Committee reviewed the remaining sections of the report. We would like to pay tribute to the Chairman and the members of the Board of Trustees for their dedicated service and compliment the Chairman for a very complete report on the activities of the Board during the past year.

Mr. Speaker, I recommend adoption of this section of the report.

The motion was seconded and carried.

Report of the Secretary

It seems that I always begin this report by reflecting on how quickly the past organizational year has passed. This year is no exception, and it seems that each year I become older, the time goes again that much faster. One would think that each year the activity in organized medicine could not surpass the previous year's activities. Unfortunately, this is not true. There are so many new things facing us with each passing year, new challenges, new problems and attacking recurrent old problems, that our schedule of meetings and physician hours spent in facing all these areas of interest to organized medicine continually increases. Our leadership again this year has risen to the occasion, and our leaders, with the aid of our excellent staff, have continued to resolve these situations in the best interest of our members of the Kentucky Medical Association and certainly for our patients.

The members of all the committees from KMA have served their time well. These committees are constantly being changed by the Association. As you know, each year new committees are added, and some of the older committees are deleted as they either complete their assigned tasks or may be combined with another committee for more expeditious operation. These committee appointments are recommended by the Board of Trustees. I would like to ask any member of the Association who may be interested in serving on a committee or who may have a particular interest in any of our committees at KMA to express his interest to his Trustee, and his name will be considered for appointment. I feel that the more one is involved in the organization and works

with one of the committees, the more the organization certainly benefits, and the individual will feel a sense of accomplishment and enjoy the membership in the organization a great deal more.

As always, I would again like to invite any of the Delegates to come to our Headquarters on Ephraim McDowell Drive. I believe all the Delegates would be proud of the KMA Headquarters office building and again, as I have stated before, this is your building, and we would very much appreciate and enjoy having you come out and see the building and tour the facilities. I think you will find that the Building Committee has done an excellent job.

It seems that again each year there are many new things which call upon our physician membership, as well as our staff, to spend more extra hours working. This year a great deal of attention, as you know, has gone to malpractice insurance. This problem is not going to be an easy one to solve, and I do not think I have to go into this in great detail since there will be, I am sure, in a number of other reports a great deal of mention about this particular problem. I do feel, though, that with the help and advice of our membership this can be resolved. Our staff has done a tremendous amount of work and research into what is going on in malpractice insurance in other states in the country, and I feel that we are in a very good position with our staff's excellent background knowledge in this problem to bring forth some good recommendations for resolution of this very difficult situation.

The Judicial Council, of which I am a member, continues to be very active. Fortunately the agenda has become smaller with the aid of the local Trustees. As I mentioned in my report last year, the Trustees have been very unselfish in devoting their time to investigating and resolving complaints at the local Trustee level. This has taken a great deal of the work off the Judicial Council, and I believe at this time our agenda is the smallest that it has been in years. I think this is not only due to the cooperation of the Trustees, but also to the adherence of Kentucky physicians to ethical practices. I certainly want to again thank and commend all the Trustees who have been so helpful to the Judicial Council this year.

A great deal of time has been spent in many of the meetings concerning the budget. I am sure that there will be a good deal said about this in other reports. I think we all recognize that all costs are going up greatly, and certainly the cost of our organization as far as operating expenses continues to rise. I have great confidence in the membership of the organization in its understanding of the Budget Committee Report and its support of this fine and informative report.

During the past year, Mr. Gil Armstrong, who has been one of our liaison people with the Legislature, has retired. Gil also was very active in the Rural Kentucky Medical Scholarship Fund. He has been a very faithful, conscientious and devoted staff member, and we certainly will miss him in the years to come.

Each year I attempt to review the number of hours spent by physicians in attendance at meetings, as well as the number of physician miles traveled. This work continues to increase as all the other activities do. The Board of Trustees met six times within the past year from August 1, 1974, to July 31, 1975. The total number of physicians in attendance at these meetings was 168; total physician hours, 1,252; and the total number of physician miles traveled for the Board of Trustees was 21,434.

The Executive Committee met seven times. The total number of physicians in attendance was 59, and the total physician hours spent was 866 with the total number of physician miles travel being 7,010. One would note that the Executive Committee work increased almost fourfold over the last year.

Other KMA committee meetings included 70 meetings, which were attended by 663 physicians. These physicians spent 6,985 hours in attendance at these meetings, and the total number of physician miles traveled was 87,691, which is quite a large figure.

In addition to the above, there were certain meetings with other allied groups which totaled 178. There were 813 KMA representatives involved. The total number of miles traveled was 13,088.

In addition to this, there were ten out-of-state meetings involving 34 total days. The total number of representatives attending these meetings was 30, and the total number of miles traveled was 24,600.

The total mileage for the Board and Executive Committee meetings was 28,444; total mileage for other KMA committee meetings was 87,691 totaling 116,135 miles. When all the meetings were included, the total mileage for physicians' travel doing KMA work was 153,823 miles, which is a figure that I believe would indicate to you the amount of time and effort spent by our staff and physicians who so kindly devote themselves to this work.

Again I would like to call attention to our KMA Headquarters staff. It seems that each year I think it could not possibly surpass the job it has done the previous year. This is always very gratifying to me to see the way that our Headquarters staff members seem to handle the great volume of work which they have to do and do it with such precision and excellence that one would hardly know that much effort had been put into it. Their work is almost never done. They are constantly staffing and attending one committee meeting or another. They are always ready and willing to be most helpful in any situation. I think the smoothness of our operation attests to the devotion and ability of our KMA staff. I would again like to sincerely give them a strong vote of appreciation for their excellent work year after year.

This past year has been a very active year at KMA. I am sure that the coming year will be even more so with new governmental programs, revisions of old governmental programs, malpractice insurance and many other problems, which I am sure, we do not conceive at this time which may confront us. I have great confidence in our leadership and our staff in their ability to carry on their work in the future as well as they have in the past and again to reaffirm our determination to pursue the course which will be most beneficial for the health care of our citizens of the Commonwealth of Kentucky.

S. Randolph Scheen, M.D., Secretary

Recommendations, Reference Committee No. 1

The Report of the Secretary has been reviewed by the Reference Committee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Editor

The *KMA Journal* has continued throughout the past year to portray the activities of Kentucky physicians, both in the realms of practice and academic medicine. We have tried to continue our emphasis on continuing medical education, with multiple departments devoted to this activity. We especially commend Doctor Paul Grider, our Scientific Editor, and the Board of Consultants for their fine work throughout the year in evaluating and processing papers submitted. We are pleased to report that the quality of papers submitted continues to be high, and the quantity continues to be more than adequate to produce a *Journal* of which we can be scientifically proud.

The fiscal picture of *The Journal* is not so bright; the rising printing costs, coupled with continuing problems with regard to advertising priorities on a national level, force us to concern ourselves with finances frequently. It is to be hoped that advertisers will continue to see that the personal attention of the physician is more often gained through journals of this sort than through mass media; for the moment we are able to continue on our present course.

The Editorial Board has increased its membership this year, adding two new Assistant Editors, John S. Llewellyn, M.D. and G. Randolph Schrodt, M.D., both of Louisville. They, along with Associate Editor Henry B. Asman, M.D. and Assistant Editor A. Evan Overstreet, M.D., meet with Jerry Mahoney, the Managing Editor, on a regular monthly basis to discuss various aspects of publishing *The Journal.*

As always, the Editorial Board continues strong in the feeling that the state *Journal* has a unique and valuable place in the affairs of physicians in Kentucky, and we propose to continue to develop our value to this constituency.

Walter I. Hume, Jr., M.D., Editor

Recommendations, Reference Committee No. 1

The Report of the Editor has been reviewed. The Committee wishes to congratulate the Editorial Board for a fine *Journal.* We note with concern the increasing cost of publication.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Treasurer

With this report I complete my service as your KMA Treasurer. Having served in this capacity for six years prior to the limitation of two full three-year terms, today finds me finishing 12 consecutive years in this office. It has been most interesting and certainly has given me the opportunity to see KMA grow into "big business."

Your House of Delegates envelope contains a Statement of Financial Condition of the Kentucky Medical Association as of June 30, 1975, a Statement of the Changes in the Fund Balances and Condensed Statements of Income and Expense of the Current Fund, Reserve Fund, McDowell House and the Postgraduate Medical Education Fund for the year ending June 30, 1975.

The complete report of audit for the fiscal year ending June 30, 1975, is available to all members of the Kentucky Medical Association at the KMA Headquarters Office, 3532 Ephraim McDowell Drive, Louisville, Kentucky.

Thank you for the opportunity of allowing me to serve KMA as its Treasurer. Your support has been gratifying.

Keith P. Smith, M.D., Treasurer

Recommendations, Reference Committee No. 1

The Report of the Treasurer has been reviewed by the Reference Committee. We wish to call attention to the fact that Doctor Keith P. Smith has concluded 12 years of outstanding and faithful service as Treasurer for the Kentucky Medical Association.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Delegates to AMA

The House of Delegates of the AMA has met on two occasions since our last report: in Portland, Oregon, November 30-December 4, 1974, and in Atlantic City, June 14-19, 1975. These were historic sessions of the House of Delegates. Many weighty matters received hours of concerned deliberations.

A mandatory, special assessment of $60 for AMA members was approved by the House of Delegates at the 28th Clinical Convention in Portland. The assessment, effective January 1, 1975, for AMA members excluding students, interns and residents, is expected to improve immediate cash-flow problems and help build up depleted financial reserves.

Rejecting a $90 dues increase proposed by the Board of Trustees, Delegates instead called for a Special Committee of the House to study the dues issue and report back at the 1975 Annual Meeting.

Presentation of Awards

Distinguished Service Award: William R. Willard, M.D., D.P.H., Moundville, Alabama, Dean of the College of Community Health Sciences at the University of Alabama, was selected by the House as the recipient of the Distinguished Service Award.

Special Award for Distinguished Service: Ernest B. Howard, M.D., M.P.H., Executive Vice-President on leave from the AMA who will retire March 1, was given a Special Award for Distinguished Service by the House.

Doctor Howard, who joined the AMA in 1948 as Assistant General Manager, was given successive promotions until 1969, when he was named Executive

Vice-President. Doctor Howard's prior experience included positions with the Massachusetts Department of Public Health, the Surgeon General's Office of the U.S. Army and Chief of the Field Party to Peru of the Institute of Inter-American Affairs.

Report of the AMA President

AMA President Malcolm C. Todd, M.D., told Delegates at the Clinical Convention in Portland, that "freedom has made American medicine the most creative in the world" with the "very essence of professionalism cherished so highly by the nation's physicians." Doctor Todd pointed out that medicine's freedom, and hence its professionalism, are threatened.

Chief among the threats are various legislative proposals which would impose a compulsory national health insurance system, would make health care a public utility to "reduce each of us to the level of an electric wire or a telephone line," and manpower bills that would "imply indentured service in medical education."

While admitting that the AMA was not 100 percent effective legislatively, he said that, "No element in society has a perfect score. Any element has to set its sights not on the best of all possible worlds, but the best of all possible realities."

He said that if the AMA is to be effective in seeking a National Health Insurance plan that would "respect both public needs and professional competence," in countering overly-stringent health planning and manpower bills, and in mitigating malpractice problems, then "it will need the money."

Doctor Todd said he personally believed that advertising does "play a useful role in physicians' education on drugs", but that "suspicion is easily planted and spread in these skeptical times, and there is reason to be sensitive to it." He urged careful consideration in the months ahead as to whether advertising should be banned from AMA publications.

In concluding his mid-term address, for which he received a standing ovation, Doctor Todd said: "I leave you with two questions: Is the survival of our profession in danger? I say that it is. Is a dues increase the necessary price that we must pay for our survival? Again, I say yes. And it seems to me, by God, that no price could be so small for anything so great."

Summary of Actions of the House of Delegates

Because of the wide-ranging nature of the actions taken by the House, and for the sake of clarity, this summary will be divided into five subject areas with appropriate sub-headings as follows:

—Association and Internal Matters of the House
—Physicians and Hospitals and Medical Schools
—Physicians and the Government
—Physicians and the Public
—Miscellaneous

Association and Internal Matters of the House

AMA Finances and Related Matters: In assessing a mandatory, $60 special assessment effective January 1, the Delegates acted to strengthen AMA finances.

The House was reminded that the Association has operated at a deficit for four of the last five years, and that cash reserves have been seriously depleted during that time. In addition, AMA finances in 1974 were adversely affected by inflationary pressures.

After almost six hours of comment and deliberation on Tuesday afternoon and Wednesday morning, the Delegates adopted the $60 special assessment as a stop-gap measure.

The question of a dues increase was referred to a Special Committee of the House to be appointed by the Speaker. The committee will make a comprehensive study of the AMA's financial priorities and capabilities, and report to the House at the 1975 Annual Meeting.

Professional Liability: During a discussion of malpractice problems, the House adopted a recommendation calling for the Board to give "priority attention" to providing legal counsel and advice to AMA members and state societies in the event their professional liability insurance is not renewed.

The House also emphasized the necessity for state associations to seek legislative remedies for malpractice problems, and directed that the AMA continue to cooperate with the Medical Liability Commission.

Physicians and Hospitals and Medical Schools

Due Process: The House adopted several recommendations which reaffirm the rights of all physicians, including housestaff and medical students, to due process. In related actions, the House adopted as AMA policy the proposition that a student's academic records should be open to inspection so that he/she may profit educationally; and referred back to the Judicial Council for further study a report involving three cases of alleged violation of due process at the local level.

Guidelines for Housestaff Contracts: The House adopted a set of revised guidelines for housestaff contracts. The proposed guidelines, as revised, had been approved by the Council on Medical Education, the Board of Trustees and the Council on Medical Service.

Continuing Competence of Physicians: Delegates also adopted a Board report calling for strong programs of continuing medical education and peer review as alternatives to relicensure since "the difficulties inherent in relicensure clearly outweigh any potential benefits."

Specific recommendations include all possible encouragement and support for the AMA, constituent societies, JCAH and other bodies in expanding CME programs; that the AMA give high priority to enhancing and reviewing effective methods of continuing competence; that patient satisfaction should be included in performance evaluation; and that well-designed peer review programs be endorsed as an important component of performance evaluation. The House also stressed that evaluation of performance, rather than knowledge per se, is the best method of appraising competence in patient care.

In other actions related to physicians and hospitals and medical schools, the House:

—Adopted an amended resolution which urges

that duplication of local peer review procedures be avoided; that medical audit or utilization protocols used in screening be limited to those which are demonstrated to be valid, reliable and which do not add needlessly to cost; and that when local peer review groups recognize that a hospital medical staff has adequate medical audit and utilization procedures, that fact should be recognized by governmental agencies and JCAH.

—Adopted a Board report detailing legally-approved methods for the exchange of information between and among medical societies and hospitals concerning a physician's hospital privileges or practice.

—And requested that a "comprehensive report" be presented at the 1975 Annual Meeting on questions and issues related to foreign medical graduates.

Physicians and the Government

National Health Insurance: Delegates gave the Board of Trustees a vote of confidence for its efforts to develop new approaches to NHI which maintain traditional AMA goals. The House adopted a Board report containing basic guidelines for NHI deliberations.

Manpower and Planning Bills: The House adopted an emergency resolution expressing unanimous opposition to U.S. House of Representatives bills which would divide the nation into health service planning areas and treat health care as a public utility, and which would require medical students to reimburse the government for capitation.

Prepaid Plans and Bonuses: Delegates adopted a Judicial Council report which cautions that the payment of bonuses to physicians in prepaid health care plans such as HMO's for minimizing the utilization of services may interfere with the physician's obligations to his patients.

* * * *

In the most momentous session to be held in decades, delegates at the 124th Annual Convention in Atlantic City urged vigorous AMA action in a number of medical problem areas—including malpractice and federal intervention—and then approved a substantial dues increase to assure the necessary financial support.

Meeting for 22 hours and 37 minutes, the longest Convention in recent memory, the House acted on 73 reports and 168 resolutions for a total of 241 items of business.

Repeatedly emphasizing stronger AMA involvement in confronting problems facing local physicians, an overwhelming majority of the House voted to raise annual dues of regular members to $250, intern-resident dues to $35, and to maintain student dues at $15.

Elections

Delegates selected Richard E. Palmer, of Alexandria, Virginia, as president-elect. Others elected or re-elected to positions in the Association were:

Vice-President: George W. Slagle, Michigan

Speaker of the House: Tom E. Nesbitt, Tennessee (re-elected)

Vice-Speaker of the House: William Y. Rial, Pennsylvania (re-elected)

Trustees, for 3-year terms: Joe T. Nelson, Texas (re-elected); Robert Hunter, Washington (re-elected); Jere W. Annis, Florida (re-elected); Joseph M. Boyle, California. For the unexpired two-year term of Richard E. Palmer, named President-Elect, Lowell H. Steen, Indiana.

Inaugural Address

Max H. Parrott, President of AMA

In his inaugural address on Wednesday, June 18, Doctor Max H. Parrott, the new AMA President, said that "the great national debate on health and medical issues is a clash between (government) utilitarianism and (medical) humanism."

In viewing medical care as a commodity rather than a service, Doctor Parrott said, "the health care planners and regulators see medical care as little more than a numbers game . . . If only the commodities of health care can be more efficiently organized, assembly-line style, if only the providers of care can be better coordinated as a work force, then the consuming public will be eternally blessed."

Final Remarks to the House

Malcolm H. Todd, AMA President

"Future shock" has created an "identity crisis" in American medicine, including the AMA, according to Malcolm C. Todd, AMA President, who gave his final report to the House on Sunday, June 15. "Future shock," Doctor Todd said, "has hit our Association so abruptly, so hard, and in so many ways, that it has caused an identity crisis. Physicians wonder what the American Medical Association is today."

And Doctor Todd urged that the AMA focus substantial energies on "quality of care—the objective for which this association was founded." The major thrust of this effort should be towards education, especially continuing education.

In support of that thrust, he asked delegates to consider AMA establishment of a "university without walls for continuing education." "Operating in coordination with the medical schools, this university might confer an advance degree after a full year of educational activity. Through its university status and its conferral of degrees, it would lend a new image and a new prestige to continuing education," Doctor Todd said.

Doctor Todd said the AMA must be concerned with "Big Brother" government. At the same time, he said, the AMA must support health programs to benefit all the "little brothers in America."

So he concluded that, "This Association must have the full support of our profession—numerically, morally and financially. Otherwise it cannot do what it has to do, and we, as a profession, cannot do what we have to do."

Association and Internal Matters of the House

Dues Increase and Related Priorities: In increasing annual dues of regular members from $110 to $250, delegates also served clear notice of a new and

aggressive stance by the AMA in dealing with the many problems facing the nation's physicians.

In just one of the problem areas discussed—malpractice—the House called for the AMA to take immediate actions to help ease the crisis, including the formation of an AMA-sponsored professional liability reinsurance company.

The company will provide backup or second-level coverage for those state medical societies that have sponsored their own medical liability insurance programs.

Meanwhile, delegates unanimously endorsed a substitute resolution applauding the recent suit filed by the AMA against HEW regulations which mandate post-admission certification of hospital patients, and left no doubt that a primary reason for approving the dues increase was to provide fiscal support not only for the present suit, but for similar actions as well. Thus the second resolve of the resolution reads:

"That the Board be encouraged to continue to take such action in the future on further legislation or government regulations that threaten the ability of physicians to provide quality medical care to patients."

In other priorities related to the dues increase, the House called for continuing efforts to re-build the AMA on a sound financial basis, and strongly supported a reshaping of the AMA publishing program as well as a restructuring of the organization itself.

Advertising-Publications: Acting on further information provided by the Special Committee of the House appointed at Portland last December, delegates endorsed "a policy of aggressive advertising promotion" in AMA publications and asked the Board to implement this policy at the earliest possible time.

In other actions, the House urged that the 10 specialty journals be placed on a self-sustaining subscription basis, or that appropriate arrangements be reached with the specialty societies involved.

Organizational Structure: The House endorsed the concept of restructuring the AMA, including Councils and Committees, and directed its Council on Long Range Planning and Development to submit a definitive report at this fall's Clinical Meeting in Honolulu.

Key elements in the report are expected to be the 1975 AMA Plan, and its clustering of AMA priorities into five major areas, organizational structure; resolving the malpractice crisis; fighting increased government intervention; maintaining AMA's leadership role in medical education; and strengthening AMA resources.

Federal Health Planning Program: The House unanimously supported the Board in its recent actions to oppose implementation of the National Health Planning and Resource Development Act enacted by the last Congress.

The delegates pledged support for "any action, including legal action," that the Board deems appropriate and effective in preventing implementation of the new planning law.

PSRO Policy Reaffirmed: Delegates reaffirmed present AMA policy on PSRO's and defeated a call for repeal of the PSRO law.

The policy basically calls for AMA action to seek constructive amendments to the law and appropriate regulations and directives, and to support continued monitoring of the program. The policy also holds that should the PSRO program become too restrictive, however, the Board can seek repeal. And here again, the House cited the possibility of legal opposition if it becomes appropriate.

In other actions related to peer review, Delegates urged physicians to "continue to perform peer review directed at increasing the quality of patient care and reducing its cost," and also urged physicians not to seek compensation for non-government peer review participation as established in hospitals. The Board endorsed compensation for government-connected peer review programs, however.

National Health Insurance: Delegates supported the national health insurance bill of the AMA which has been introduced in Congress. The bill would provide both basic and comprehensive benefits for all Americans, but would minimize federal administration and financing.

Medical Schools: The House voted to continue opposition to medical manpower legislation now before Congress which would require medical students to repay capitation grants to their schools or else provide "in-kind" service in areas stipulated by government, and which would provide federal control of the number and distribution of residencies.

The foregoing information is only a resume of the action taken by the House of Delegates of the AMA at its 1975 Clinical Convention and 1975 Annual Session. Full information is available to you through the KMA Headquarters Office.

Along with the entire AMA delegation, I would like to thank the KMA officers and staff for their help in the organization and report of this year's activities of the AMA House of Delegates to the KMA membership.

J. Thomas Giannini, M.D., AMA Delegate

Recommendations, Reference Committee No. 1

The Report of the Delegates to the AMA has been reviewed. We wish to commend the Delegates for their activities in representing the KMA at the AMA.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Executive Director

This past year, perhaps more than any before, has been one of anxiety, anguish and frustrating experiences.

The "sleeper" that raged like a bad nightmare was the liability insurance crisis that hit us at the start of 1975. Literally thousands of hours have been spent in trying to resolve the overall problem while helping individuals who had lost or were about to lose their coverage. Many sessions were spent with the Insurance Commissioner and other officials in his department. Most of our extremely acute problems were resolved with their help.

The Federal Government's posture this past year was characterized by the issuance of regulations by the Department of HEW that not only would drastically alter the practice of medicine, but apparently would take those matters intended and given by Congress away by regulatory action. KMA's Board of Trustees authorized legal action against the Secretary of HEW when he issued utilization review regulations early this year. It seems apparent that legal action may be required more often in the future to maintain "fair play"; or else, it is likely that medicine as we know it today will fall victim to the *Federal Register* process. KMA has no doubt submitted more testimony to Congressional committees and communicated more with our Congressional delegation this year than in all the years of our history combined.

Staff has tried to adjust to these changing times and become more specialized to deal as effectively as possible when a problem or opportunity presents itself. In addition, through our Public Relations Committee, we have tried to get more information to the public about KMA, its activities and the problems that affect the public, such as liability insurance.

As staff, we have been quite conscious of the runaway inflationary spiral during the past couple of years. Recognizing that our initial five-year dues plan extended through this year, we continued our practice of conservative financial management and instituted a number of cost control measures to keep well within our budget. I am pleased to report this was accomplished with greater results than projected.

KMA conducted the first statewide dues billing from the Headquarters Office this past year and it proved to be an overwhelming success. Not only were dues received earlier in the Headquarters Office, but some physicians who had dropped their membership, for one reason or another, came back into the ranks to give us a record membership year. At the end of 1974, we had 2,885 members of which 2,629 were active. As of July 1, 1975, we had already surpassed that mark with 2,903 members of which some 2,660 were active.

Normally, I highlight the activity of staff during the past year in this report. I will not go into detail on this subject because the article "Financing the Future" by Paul Parks, M.D., in the July *Journal* outlines the many new responsibilities assumed by staff over the past five years, during which time few committees or programs were eliminated. A reprint of this article can be found as a part of the Report of the Chairman of the Board. To discuss it further here would be redundant, but it does address many things that I would otherwise have put into this report.

Gil Armstrong, a dedicated staff member of KMA for over ten years, retired June 30. Prior to his retirement, Gil had an opportunity to work a couple of months with Jan Ledford, whom we welcomed to the KMA staff last April. Jan will join Jerry Mahoney in the weeks ahead getting geared up for and working with the members of the 1976 Kentucky General Assembly.

We anticipate an active Legislature. The Interim Committee System has kept our staff constantly involved and on the road to and from Frankfort. A record number of health related bills will no doubt be introduced.

As we look to the immediate future, we know we have a job to do. We must maintain the continuity of KMA's good programs and projects conducted from year to year. We must expend every effort to see the resolution of the liability insurance crisis . . . seek and maintain the availability of liability insurance at a reasonable rate. We must prepare for the future by properly training staff "to negotiate" for physicians whenever the need exists. We must be prepared to implement plans for a solid continuing medical education program in Kentucky. We must play an active role in all state health legislation but still keep a keen ear attuned to the national picture and be prepared to act when necessary. If history repeats itself, we must look forward to another year when more meetings than ever will be attended; more programs, seminars and meetings conducted; more physicians, traveling more miles, involving more hours and days to, hopefully, accomplish more for the physicians of Kentucky.

On behalf of your entire staff, I express a deep gratitude for the opportunity of working for you. To the committee members, Board members and officers who give us daily guidance, we give a special thanks. Because of the visibility of KMA in the past few years, we are having the opportunity to talk with and meet many more individual members than we did before.

Heaping praise on staff may seem like braggadocio. Yet, every day I observe these dedicated, unselfish individuals giving 100 percent, working all kinds of hours to get the job done, helping each other in a cooperative spirit to meet deadline after deadline, and tackling an unending heavy workload. I feel a personal responsibility to report that attitude to you.

We extend an invitation and promise a cordial welcome to any member to visit the Headquarters Office at any time.

Robert G. Cox, Executive Director

Recommendations, Reference Committee No. 1

The Report of the Executive Director has been reviewed by the Reference Committee. We wish to commend the Executive Director and his staff for the dedicated service they continue to render in behalf of the Association.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Advisory Committee to the Woman's Auxiliary

We continue to be impressed by the intense activity of the leaders and members of the Woman's Auxiliary and must commend them for consistently choosing vigorous, innovative officers.

Rather than attempt to list the many areas of involvement of the Auxiliary this year, we would direct

attention to the Report of the President of the Auxiliary and also urge all physicians' spouses to join and become active in this worthwhile organization.

The involvement of this Committee with the Auxiliary on an informal basis has been, we feel, very beneficial and we would recommend that this Committee be continued to further enhance liaison and coordination between our two groups.

Fred C. Rainey, M.D., Chairman

Recommendations, Reference Committee No. 1

The Report of the Advisory Committee to the Woman's Auxiliary has been reviewed.

Mr. Speaker, I recommend adoption of this section of the report.

The motion was seconded and carried.

Substitute Resolution E

Daviess County Medical Society

WHEREAS, a conflict of interests may exist when the employee of an insurance company serves on the editorial board of *The Journal of the Kentucky Medical Association;* therefore be it

RESOLVED, that the editorial board of *The Journal of the Kentucky Medical Association* should not include an employee of an insurance company.

Recommendations, Reference Committee No. 1

The Reference Committee heard several individuals representing themselves, component societies, and the Board of Trustees, speaking in opposition to Resolution E. No member of the Association was present to speak in favor of the resolution. The Reference Committee recommends rejection of Resolution E.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution M

Jefferson County Medical Society

WHEREAS, the AMA dues of $110 per year were found to be inadequate and it became necessary for the AMA House of Delegates, through a special study committee to study the financial structure of the AMA, together with careful review of all assets, income and expenses, and

WHEREAS, the reading of the AMA Study Committee on finances report reveals that the committee and the House of Delegates were convinced that the AMA budget had been cut where possible and programs dropped so that those items remaining in the budget can be determined absolutely necessary, and

WHEREAS, the AMA House of Delegates and its Reference Committee thoroughly considered the AMA budget and necessary dues at their meeting in June, 1975, voting unanimously to establish 1976 dues at $250 per active member, and

WHEREAS, the Jefferson County Medical Society Officers, Board and Steering Committee have thoroughly studied and discussed the purpose of the AMA, how it directly serves practicing physicians in the county, and a list of its most recent accomplishments, which could only have been achieved by a strong national organization, and

WHEREAS, to list a few of the important accomplishments in the last 90 days is to report: (a) successful in three legal actions to stop Medicare U.R. Regulations; (b) defeated pre-admission certification; (c) stopped the Federal Government from starting 1800 HMOs; (d) instigated legal action against maximum allowable cost regulations; (c) increased physicians retirement under Jenkins-Keogh; (f) won a challenge to the Health-Manpower Act to prevent residents from capitation repayment after education; (g) has started a new department called Negotiations to handle third party disputes; (h) legal support to aid medical staffs in work with hospitals Board of Trustees; and (i) very important assistance to many states in the resolution of the professional liability insurance crisis, and

WHEREAS, we must encourage all members to support a strong, viable national organization to speak for medicine rather than many different splinter or self-interest groups, therefore be it

RESOLVED, that the KMA House of Delegates express itself in favor of the AMA dues increase and, thereby, assist the county societies and state associations in the collection of 1976 AMA dues from all members.

Recommendations, Reference Committee No. 1

A representative of the Board of Trustees presented testimony of the Board's support of Resolution M. No testimony was heard against the resolution. Reference Committee No. 1 recommends acceptance of Resolution M.

Mr. Speaker, I recommend adoption and implementation of this section of the report.

The motion was seconded and carried.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 1 as a whole, as amended.

The motion was seconded and carried.

Mr. Speaker, as Chairman, I would like to express my thanks to the members of Reference Committee No. 1 for their help in preparation of the report and to Mrs. Jean Wayne for her excellent work in preparing this report.

REFERENCE COMMITTEE NO. 1

Peter P. Bosomworth, M.D., Lexington, Chairman
Don E. Cloys, M.D., Richmond
Michael B. Flynn, M.D., Louisville
Wally O. Montgomery, M.D., Paducah
Raymond D. Wells, M.D., Inez

REFERENCE COMMITTEE NO. 2

Nelson B. Rue, M.D., Bowling Green
Chairman

Reference Committee No. 2 considered the following reports and resolutions:

14. Report of Scientific Program Committee
15. Report of Scientific Exhibits Committee
16. Report of Continuing Medical Education Committee
17. Report of Cancer Committee
19. Report of Hospital Committee
40. Report of Emergency Medical Care Committee
41. Report of Interspecialty Council
1. Report of the President; Beginning with the paragraph on Page 1.13 starting with "Another positive issue . . ." to the first full paragraph of Page 1.14 starting with "The KMA President . . ." **only**
20. Report of Advisory Committee to Blue Cross-Blue Shield; Beginning with the last two lines on Page 20.7, pertaining to that section entitled "Physician Cost Awareness Plan" to the last paragraph on Page 20.8 **only**

Resolution Y—Medical School Admission Programs to Help Rectify Physician Maldistribution (U of L AMSA Student Government)

Resolution AA—Council on Public Higher Education Recommendations (KMA Board of Trustees)

Resolution BB—Physicians' Assistants (KMA Board of Trustees)

Report of the Scientific Program Committee

The KMA Scientific Program Committee met this year in November to plan the Scientific Program for the KMA Annual Meeting. Since that meeting, ten months of hard work have been put in by your committee and staff in coordinating the program.

In December, your Chairman and the KMA President met with the 17 Specialty Group Presidents to discuss their participation in planning the scientific session. The Scientific Program of the specialty groups held in conjunction with our general sessions have proven to be valuable, and we feel provide an excellent contribution to the continuing education of our members.

I am extremely appreciative for the excellent cooperation in planning the overall meeting that we always receive from the specialty groups.

This year will be the third year that the meeting will be held at the Ramada Inn, Bluegrass Convention Center. Those attending KMA's Annual Meetings the past two years have been very enthusiastic about returning to the Inn's very pleasant surroundings. The Scientific Program Committee's objective is to present an appealing and educational program that will provide maximum benefit to the members of KMA; and certainly providing this educational program in a pleasant atmosphere is helpful.

It has been the Committee's experience over the past several years that the selection of themes for portions of the Scientific Program has proven to be beneficial and that policy has been carried over into this year's sessions. Themes are designed to maintain continuity of the program and afford an opportunity for indepth coverage of the subject. Themes being used this year include Sexual Performance, Sports Medicine, Cancer—Detection and Therapy and Gut—Issues and Answers.

This year's program will be comprised of individual presentations and the committee members and specialty groups have gone to great lengths to bring in some of the country's outstanding speakers. We are also proud of the fact that the KMA Annual Meeting Scientific Program is one of only four in the entire United States which has been accredited for continuing education by the American Medical Association. It also receives credit from the Kentucky Academy of Family Physicians.

This year, as in the past, the South Central Bell Telephone Company is sponsoring the Message Center in the Technical Exhibit Hall. This continues to be a valuable service to our Association membership and we are extremely grateful for it.

I appreciate the efforts of those who assisted in the formation of this program and would like to give a special note of appreciation to the committee members, specialty group presidents and specialty program chairmen.

Any suggestions the membership might have for future programs will certainly be very welcome.

Gabe A. Payne, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee commends the Scientific Program Committee for the program presented this year. The Committee wishes to express its thanks to the South Central Bell Telephone Company and the Kentucky Society, American Association of Medical Assistants for sponsoring and staffing the Message Center.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Scientific Exhibits Committee

The Committee on Scientific Exhibits meets late in the Associational year in order to review applications for scientific exhibit space at the Annual Meeting. As a result, it has become customary for the Committee to submit a final report prior to the meeting to make sure that it will be included with all committee reports presented to the House of Delegates.

This year we hope to have approximately 15 exhibits, which will be located along the entrance to the general assembly hall in the Bluegrass Convention Center. The scientific exhibitors will be available to discuss their exhibits and will have special badges and ribbons to identify themselves.

Exhibitors will receive a certificate for participating

in this phase of continuing medical education. Our committee feels that the scientific exhibit is a valuable contribution to postgraduate physician education and is hopeful that everyone attending the Annual Meeting will visit the exhibits.

John M. Baird, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee expresses thanks to the Scientific Exhibits Committee for the high quality of scientific exhibits and wishes to encourage more scientific exhibit participation. The Committee feels that the scientific exhibits are a great asset to postgraduate physician education.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Medical Education Committee

Continuing Medical Education is assuming an ever larger role in the professional lives of physicians and in the past few years we have seen a great expansion in medical association involvement in this area. With the adoption of Resolution A in 1974 by the House of Delegates our Association has formally joined the ranks of those organizations which have recognized the value and need of continuing education and our Committee is honored in being able to play a part in this activity.

Our efforts this year were directed, in the main, in working towards implementation of Resolution A and a total of five meetings were devoted to these actions although other topics were considered. For the sake of simplicity, this report is divided into sections concerned with major items.

Medical Education Conference

The biennial Conference on medical education was held on February 7 and 8 at the Holiday Inn at Cave City, Kentucky, and was sponsored jointly by KMA, the University of Louisville and the University of Kentucky. The program Chairman, on behalf of the Medical Education Committee, was William P. VonderHaar, M.D. Traditionally, this Conference is attended by members of the faculties of the two medical schools, the KMA Board of Trustees, members of the Medical Education Committee, and other selected persons interested in continuing education. It provides a forum for discussion of topics of mutual concern to the practicing and academic communities.

The Conference addressed three major topics which were: medical association involvement in continuing medical education, medical school curriculum and student selection, and postdoctoral training. The first topic considered KMA's involvement in continuing education efforts while the latter two addressed information developed by Subcommittees of the Medical Care Availability Study Committee commissioned by the Council on Public Higher Education.

A status report on KMA's CME and Continuing Medical Education Accreditation programs and projected plans were announced.

At the Conference, one major point noted was the need to select medical students who were strong potential candidates for primary care practice and the need to retain such students after graduation for needed areas in the state. It was pointed out that the number of residency positions available each year was substantially less than the number of graduating medical students. The need for voluntary measures to seek resolution to these problems was underscored. In all likelihood, if such voluntary measures are not successful or at least attempted, legislative action may be brought to bear in response to public demand.

The relatively small number of participants at the Conference helped enhance discussions and a good deal of vital information was communicated.

Individual Participation in Continuing Medical Education

Resolution A passed by the 1974 session of the KMA House of Delegates called for KMA to endorse and seek implementation of a continuing medical education program to be participated in by all physicians. The Resolution called for CME requirements by specialty, which could be modified from time to time by each specialty group and approved by the KMA Board of Trustees, and that each physician should comply with the requirements of his respective specialty within a three-year period. Lastly, the Resolution called on the State Board of Medical Licensure to mandate compliance by regulation for re-registration of the license to practice medicine.

The Committee's work on this project was a continuation of earlier efforts which were reported to the 1973 House of Delegates. At that time, education requirements by specialty were suggested that had been modified from similar material developed by the Oregon Medical Association. It was the strong feeling of the Committee that any form of mandatory continuing education should be directly related to specialty practice to reflect the needs of the physician in an actual practice setting. In spite of the fact that requirements had been suggested by the Committee, it was their further feeling that each specialty group in the state should have not only the opportunity, but the responsibility for developing its own group endorsed requirements and this information was requested through the KMA Interspecialty Council.

So that the membership would be informed of the Committee's thinking, an article was published in the May issue of the KMA *Journal* listing specialty group requirements received up to that time. At the same time, the following recommendations were made to the KMA Board of Trustees to be referred to the State Board of Medical Licensure:

1. The Committee recommends that the Board of Licensure utilize continuing medical education requirements by specialty as adopted by the 1973 KMA House of Delegates in approving the final report of the Committee for that year with the addition of "general requirements" as they appear

in the continuing medical education program of the Oregon Medical Association.

2. Educational accomplishments to serve in lieu of this program should be approved as they are identified by applicant physicians to the Board of Licensure.

3. These recommendations include a provision that revisions to the aforementioned requirements may be made by state specialty groups after the meeting of the KMA Interspecialty Council on May 29, 1975. The Committee also recommends to the Licensure Board that routine changes with regard to specialty requirements can be made at reasonable intervals by recognized state specialty groups through KMA and that suggested program revisions as indicated by the desires of the membership should be allowed.

4. The Committee recommends that these requirements be effected by regulation as of July 1, 1975. The terminal date of the first qualification period should end June 30, 1978.

These recommendations were approved by the KMA Board of Trustees at their meeting on April 10, 1975, and then submitted to the Board of Licensure. Since that time, it has been learned that the Licensure Board accepts the recommendations in principle with the exception that the July 1, 1975, implementation date is not possible because of the fact that the necessary regulatory process must be utilized. Some 11 specialty groups have reported their endorsed requirements, however, and it appears that the Licensure Board would like to hear from all groups before such regulations become effective. It would appear that a realistic implementation date would be some time in the late part of the year.

CME Accreditation Program

As has been reported, the essential documents to enable KMA to accredit local institutions for continuing education were approved by the AMA Council on Medical Education in late 1974. The main intent of KMA in becoming an accrediting body is to help promote valid continuing education opportunities at the local level.

A Subcommittee of the Medical Education Committee was appointed consisting of Frank R. Lemon, M.D., Chairman, and Doctors William J. Temple, D. Vertrees Hollingsworth, Sam H. Traughber and Stuart L. Graves, Jr. At the Subcommittee's direction, a letter was sent in March to all hospitals in the state, the larger county medical societies and all state specialty groups announcing the accreditation program and a brief summary was also sent describing the accreditation process and requirements. Subsequent to this mailing, the Subcommittee developed a detailed description and protocol of the accreditation program as well as an application form to be sent to candidate institutions.

Upon receipt of a completed application, the Subcommittee will review it for any clarifications or further explanations and then contact the institution to schedule a date mutually convenient for the site visit. The site team to consist of a practicing physician interested in continuing education with previous experience on a site visit, a hospital director of medical education and a representative of one of the two university medical centers will then make its visit and observe the program in progress. After this observation period, the team will meet with the CME Director of the institution and discuss any comments they might have with him for his reaction on the spot. The team will then prepare a report to the Medical Education Committee with a recommendation as to accreditation. Final approval of CME accreditation will be made by the KMA Board of Trustees and the institution will then be so notified. An institutional registration fee of $50 will be charged in addition to expenses incurred by the site team.

For informational purposes for institutions that may apply for accreditation, the Committee would like to point out that there are three methods of accreditation. Firstly, any educational programs may be accredited if the organizer or institution is affiliated with a national medical specialty or other medical group that has received AMA accreditation. Secondly, if the program organizers are affiliated with the University of Kentucky or the University of Louisville, which are accredited, the program in turn becomes accredited. The third means of accreditation is through KMA by the process described.

The AMA encourages state medical association accreditation of all programs within state boundaries as well as any programs that draw participants from less than three surrounding states. AMA has stipulated that at least one site visit must be completed within the first year by KMA if it is to sustain its accreditation authority.

AMA Fourth Biennial Conference on Medical Education

KMA was represented at this conference by members of our Committee. Participation in this conference is particularly pertinent because of the state of KMA's involvement in continuing education and educational accreditation. It was pointed out that state medical associations are becoming ever more active in CME and that 33 now offer some form of continuing education.

Medical Education Newsletter

The Committee agreed to periodically publish in the KMA *Journal* an education newspage to describe current activities and projected efforts for the benefit of the membership.

Faculty Scientific Achievement Award

Each year, the Committee votes on recipients submitted by the deans of the University of Louisville and the University of Kentucky for the KMA Faculty Scientific Achievement Award. This year voting was accomplished by mail to preserve confidentiality and a recipient was selected from each of the two schools. These awards will be presented during the first session of the House of Delegates of the Annual Meeting.

I would like to thank the members of the Committee for their diligence and interest. I don't believe that there is any valid point concerned with continu-

ing education that was not sincerely considered or debated. The members of the Committee have served the Association tirelessly and well.

R. Glenn Greene, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee approves the Report of the Continuing Medical Education Committee and wishes to commend it for its efforts.

Mr. Speaker, I recommend the adoption of this section of the report.

The motion was seconded and carried.

Report of the Cancer Committee

The KMA Cancer Committee has met on four occasions during the past year, and the Chairman has appeared before the Executive Committee of the Board of Trustees to explain its objectives.

I. The committee recommends that the KMA reiterate its previous commitment to the past and continued efforts to obtain a Pap smear annually on all adult women in the Commonwealth of Kentucky.
   a. Each physician is urged to perform the test on all his patients when practical.
   b. Of those patients not seen in a private office or clinic, the efforts of the Bureau for Health Services in offering the test to those who wish it are commended.
      1. Smears will be taken by trained Registered Nurses (for the most part, trained in the Cytology Clinic at the University of Louisville).
      2. Individual counties and regions must approve of the Bureau activities in this respect.
      3. Report of each cytologic study will be forwarded to the patient's physician.
      4. Each patient will be informed that the Pap test tests only the cervix, and does not replace pelvic and general examination, which are always advisable.
   c. Quality control of laboratory studies will be urged. Expertise of cytologic interpretation in the state is a goal of the program.
   d. Follow-up of patients with abnormal smears and biopsy reports is essential.
   e. Efforts of the American Cancer Society to educate the public in this regard are approved with appreciation.

II. The committee recommends that each physician teach breast self-examination to his patients in so far as time permits.
   a. Efforts of the nursing staffs of hospitals who wish to teach patients breast self-examination, after medical instruction, is recommended for those patients desiring this information, and when considered appropriate by the physician.
   b. Interest of the American Cancer Society and the nursing associations in this regard is commended.

III. The committee commends the establishment of a cancer center at the University of Louisville. Also, in the future, establishment of a center at the University of Kentucky is recommended.

Laman A. Gray, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee endorses the Report of the Cancer Committee and commends it for its efforts. The Reference Committee heard speakers encourage wider use of Pap smears and teaching of self-breast examination and the Committee endorses the efforts of the nursing staffs of hospitals wishing to teach self-breast examination.

Mr. Speaker, I recommend the adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the Hospital Committee

The Kentucky Medical Association Hospital Committee met on December 5, 1974, with good attendance.

The 1974 House of Delegates Reference Committee requested re-emphasizing to physicians and hospitals the cost of medical care. Subsequently, a letter was sent to all county medical societies and response was obtained indicating that some hospitals have made patients' bills available to physicians while others have gone the general route of providing lists of charges and answering any specific inquiries about patients' expenses. The Kentucky Hospital Association in the person of Mr. Hasty Riddle also took note of this and will continue to work through their organization to continue to make all aware of the cost of medical care.

A series of informational notices to be published in the KMA *Journal* on a regular basis has been established to continually keep members aware of costs.

The Kentucky Hospital Association Board of Trustees requested expansion of the responsibilities of the dry run accreditation program and it was the recommendation of this Committee to the Board of Trustees that we continue to provide physician assistance in initial dry run evaluation of hospitals but subsequent re-visitations by the Joint Commission on Accreditation should be carried out without formal assistance of the Kentucky Medical Association.

A request was also received and discussed from L. W. True, Secretary for Human Resources, to provide physician assistance in performing initial inspection surveys on those hospitals being certified under Medicare and Medicaid. The Committee recommended to the Board of Trustees that upon receipt of an outline for the procedures to be developed that physician input on a fee-for-service basis would be acceptable. Subsequent correspondence with C. Leslie Dawson, the new Secretary for Human Resources, indicates that they will be assessing their role and this program is being held in abeyance.

A survey form from the Kentucky Hospital Association regarding nurse anesthetists, where they are trained, where they are used and what the demand is was reviewed by the Chairman and its distribution was approved.

The Chairman wishes to thank the membership of this Committee, the staff of KMA and visitors who have met with us for their help and participation.

Richard B. McElvein, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the Report of the Hospital Committee and was pleased to see that an effort is being made by the Kentucky Hospital Association to provide physicians with copies of patient's bills in an effort to reduce hospital costs.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Emergency Medical Care Committee

The largest endeavor of the Emergency Medical Care Committee this year was to plan and implement the Fifth Annual Emergency Health Care Seminar which was held June 4-5 at the Executive West Hotel in Louisville. This meeting continues to grow in attendance each year as evidenced by the fact that some 430 people registered for this meeting, an increase of 80 from last year.

At the request of the House of Delegates, an entire day was devoted to basic life support and cardiopulmonary resuscitation. Response to this segment of the program was extremely favorable and has led to some discussion about the possibility of having a separate segment next year devoted to this theme. The Committee is indebted to the number of physicians from around the state who gave freely of their time to come and serve as faculty members on the program. The small registration fee charged by the Committee in putting the program together covers the cost of meals and other promotional expenses and enables us to allow many people to attend.

We were pleased to have, as featured luncheon speakers, J. Ed McConnell, President of Blue Cross-Blue Shield and Delta Dental, and Doctor Barry H. Rumack, Director of the Rocky Mountain Poison Control Center in Denver, Colorado. Doctor Rumack's expenses were underwritten by the American College of Toxicology to which we are extremely grateful.

This year we were again pleased to have the Military Assistance to Safety and Traffic units with us. Kentucky is fortunate to have two air-ambulance services operating and the Committee has been impressed with the professionalism shown by the Army in setting up and implementing the service.

We learned that communications equipment has now been installed which allows state police vehicles and helicopter crews to communicate and that hospitals having helipads are now able to communicate with the helicopter crews. Both the Fort Campbell and Fort Knox programs are fully operational and, as a matter of fact, the Fort Knox unit is the second busiest MAST unit in the country.

This year's program was accredited for continuing education credits by the American Medical Association, the Kentucky Chapter, American College of Emergency Physicians, the Kentucky Academy of Family Practice, the Kentucky Nurses Association, the Kentucky Dental Association, and the Kentucky Association of Licensed Practical Nurses. The Committee enthusiastically recommends that the Emergency Health Care Seminars be continued in the future and that the KMA Emergency Medical Care Committee be the coordinating agency.

Other areas that the Committee discussed this year included disaster plans at Kentucky airports. The Committee reviewed a report from the National Health Resources Advisory Council on airport/emergency medical preparedness which brings into focus some of the problems created by the rapid growth of the air industry. The Committee continues its interest in this area.

The tornado disasters of April, 1974, were also discussed. It appeared that the most serious problems in the Louisville area were lack of communication. The Committee is pleased to learn that communications is a state EMS priority area and that a total emergency medical services communications system is now being completed.

The members of the Committee worked long and hard this year and I would like to express my appreciation to them for their time and effort extended in the area of emergency health care.

E. Truman Mays, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the Report of the Emergency Medical Care Committee and commends this Committee on its function. The Reference Committee particularly thanks the Emergency Medical Care Committee for providing a day devoted to basic life support and cardiopulmonary resuscitation as requested by the House of Delegates in 1974.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Interspecialty Council

At the two meetings held this year of the Interspecialty Council, the major focus of activities was the development of "Norms for Care" and requirements by specialty for continuing medical education. Both of these efforts were continued from last year.

The Kentucky Peer Review Organization has assumed coordination for the "Norms for Care", or medical criteria development, as an extension of earlier work done by the Kentucky Foundation for Medical Care. Specialty groups represented on the Council continued their activities on behalf of their parent organzations and some groups submitted additional criteria.

At its first meeting, the Council was advised that KPRO would use criteria already created by other recognized organizations unless Kentucky specialty groups supplied such information. It was also learned that ultimately, KPRO will synthesize final criteria from all submitting sources using a format to be suggested by the American Medical Association at

the request of the Department of Health, Education and Welfare.

With regard to KPRO data compilation and computerization, this will most likely be accomplished through contractual arrangements with computer-capable organizations already operating in the state.

The bulk of the Council's deliberations concerned continuing medical education requirements by specialty. Representative members to the Council were asked to develop specialty society-approved educational requirements to be accomplished within a three-year period as alluded to in Resolution A passed by the 1974 session of the KMA House of Delegates.

Both the KMA Board of Trustees and the Medical Education Committee had strongly stated that educational requirements to be mandated for re-registration of the license should be stipulated by specialty groups. At the second meeting of the Council, specialty society-approved requirements were received from the following groups:

Kentucky Society of Anesthesiologists
Kentucky Society of Pathologists
Kentucky Academy of Family Physicians
Kentucky Dermatology Society
Kentucky Society for Plastic and Reconstructive Surgery
Kentucky Urological Society
Kentucky Society of Internal Medicine
Kentucky Association of Public Health Physicians
Kentucky Occupational Medical Association
Kentucky Chapter, American College of Radiology

The Council also endorsed four recommendations made to the Licensure Board by the KMA Board of Trustees which included a provision for "general requirements" for those physicians not affiliated with a specialty; that certain educational accomplishments should serve in lieu of the program to be mandated by the Licensure Board; that the requirements could be modified at reasonable intervals by the specialty groups through KMA; and that the program become effective July 1, 1975. However, the Council did note that, as determined by a poll of the representative societies conducted last year, a majority of the specialty groups favored continuing education being a voluntary function of the specialty societies.

To strengthen the continuity of the Council's efforts, each of the groups was asked to designate three representatives each to avoid loss of communication when new officers are elected or when a particular representative would not be able to attend Council meetings.

We would like to point out that the Interspecialty Council was first established to promote communications between the specialty segments of medicine in Kentucky, to provide centralized administrative services and facilities through KMA and to provide an opportunity for joint efforts in legislative and continuing education activities. It is our feeling that the Interspecialty Council does provide a valuable forum for these activities and feel it serves a very worthwhile purpose.

As Chairman, I would like to thank each of the members of the Council for their active and interested participation and would urge each KMA member to make his views known to his respective society representative to the Council so that societies' views can be expressed.

James B. Holloway, Jr., M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the Report of the Interspecialty Council and commends the Interspecialty Council for its diligence.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the President

Section Dealing with Continuing Medical Education Only

Another positive issue that will take foremost attention for us beginning January, 1976, is continuing medical education. This will be of significance because it is tied to licensure and relicensure and it will affect all. There are certain basic ingredients that we feel KMA must impose. An example is this must be an educational experience and under no sense should be a punitive, a judicial or a harrassing focus. It should serve as a documentation of scientific and medical appropriateness. Most physicians already will meet the standards that have been drawn by peer organizations.

In the program some items will prove unworkable. They must be immediately eliminated. There will also be some needs which will become readily evident once underway that will require an adjustment. This program above all others must be amenable to change without undue delay.

This documentation of doctors' efforts should be given appropriate display on such a basis that will leave no question of its meaning. From these records will come evidence that will no longer make it possible for an opportunistic antagonist to point an accusatory finger. The final purpose we must never forget of this program will be continually improving and appropriate health care for all.

Recommendations, Reference Committee No. 2

The Reference Committee commends the President for his report on continuing medical education.

Mr. Speaker, I recommend the adoption of this section of the report.

The motion was seconded and carried.

Report of the Advisory Committee to Blue Cross-Blue Shield

Section Dealing with Physician Cost Awareness Plan Only

Previously, a recommendation was made from your Blue Cross and Blue Shield Advisory Committee that some programs should be made available

which would make physicians more aware of the costs of the hospital services they prescribe for their patients. This recommendation was acted upon favorably by the House and referred to the KMA Hospital Committee for implementation. We have been pleased over the past three years to see several programs initiated to bring this into reality. Included in these efforts are letters to hospital chiefs-of-staff and hospital administrators asking them to bring this program to the attention of the staff, asking the hospitals to provide printouts periodically on various patients and forward them to the admitting physician; and recently we have noted that an entire issue of the *KMA Journal* was devoted to this subject and that periodic reminders of the average costs of certain procedures are published in the *Journal.*

The Utilization Review Department of Blue Cross has developed individual profiles on each physician in the state with regard to the services ordered for hospitalized patients. This is part of an educational program which, hopefully, will show physicians the impact they have on costs when ordering services for Blue Cross patients. The Committee feels that this is a most worthwhile endeavor and encourages the Provider and Professional Relations staff to continue to review these profiles with practicing physicians.

Recommendations, Reference Committee No. 2

The Reference Committee commends this Committee for their efforts to make physicians more aware of the cost of hospital service which they prescribe for their patients. The Reference Committee feels that Blue Cross profiles on each physician should be made available to the individual physician.

Mr. Speaker, I recommend the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution Y

University of Louisville AMSA Student Government

WHEREAS, there are many areas of Kentucky in need of physicians and health care services, and

WHEREAS, Kentucky's medical schools have an obligation to meet and supply the health care needs of the populace, and

WHEREAS, recent statistics indicate that medical students from underserved areas (mostly rural) return as physicians to underserved areas in significantly greater percentage than do students from urban areas, and

WHEREAS, many underserved communities are currently attempting to attract physicians, and

WHEREAS, there are qualified medical school applicants from underserved areas who are not always accepted by medical schools; therefore be it

RESOLVED, that admissions incentives and priorities be given to qualified medical school applicants from rural areas needing physicians; and be it further

RESOLVED, that the Kentucky Medical Association work with the State Legislature and with our medical schools in implementing this policy; and be it further

RESOLVED, that the Kentucky Medical Association Board of Trustees report to the 1976 Annual Meeting on the efforts in this area.

Recommendations, Reference Committee No. 2

The Reference Committee heard considerable discussion regarding Resolution Y—Medical School Admission Programs to Help Rectify Physician Maldistribution, introduced by the U of L AMSA Student Government. The committee commends the sponsors of this resolution for their concern for the need for more rural physicians, but feels it would be discriminatory to have geographical location of the applicant as a priority for selection for admission to medical school. The committee feels that other more equitable incentives could be offered to show a gain in the number of rural physicians.

The committee recommends that this resolution not be accepted.

Mr. Speaker, I move the adoption of this section of the report. The motion was seconded from the floor.

At this point, the Vice-Speaker recognized Garnett Sweeney, M.D. who proposed that wording changes be made in the second sentence of the Reference Committee's recommendations, and that the third sentence be deleted completely. With the changes he suggested, the second sentence would read as follows: "The House commends the sponsors of this Resolution for their concern for the need for more rural physicians, and feels it would be appropriate to consider the geographical location of the applicant as a priority for selection for admission to medical school." A motion was made, seconded, and passed that the above changes be made.

A motion was then made that Resolution Y be introduced as a Substitute Resolution and that it be approved as written, and further that the line of the Reference Committee recommendations reading, "The Committee recommends that this Resolution not be accepted," be amended to read, "The Committee recommends that this Substitute Resolution be accepted."

The motion was seconded from the floor and on a call for the vote, passed 86 to 73.

Resolution AA

KMA Board of Trustees

WHEREAS, the Council of Public Higher Education was charged by the Kentucky General Assembly in 1973 to point out problem areas involving higher education, and

WHEREAS, a recent report of the Council of Public Higher Education purports to represent all major professions dealing with medicine, in fact, the profes-

sions mentioned had little or no representative input into this report, and

WHEREAS, the recommendations of the Council of Public Higher Education affect every area of our medical practice including education of our students, interns and residents; continuing medical education; licensure; the makeup of licensure boards; the funding of primary care centers; etc., etc., etc.; now therefore be it

RESOLVED, the Board of Trustees of the Kentucky Medical Association goes on record as being opposed to these recommendations as presented by the Council of Public Higher Education (for implementation) and further feel that the Council of Public Higher Education has completely overstepped the charge given to them by the Kentucky General Assembly. Be it further

RESOLVED, that the Board of Trustees urge the House of Delegates of the KMA to take a similar stance, and be it further

RESOLVED, that our collective view of this document be forwarded to the Legislative Research Commission and to the Governor of the Commonwealth of Kentucky.

Recommendations, Reference Committee No. 2

The Reference Committee reviewed Resolution AA —Council on Public Higher Education, introduced by the KMA Board of Trustees, and recommends that the first and second resolves be changed to read, *"Resolved, the House of Delegates of the Kentucky Medical Association goes on record to request the Council on Public Higher Education to refer matters of concern to the medical profession in Kentucky to the Board of Trustees of the Kentucky Medical Association at least two months, and preferably sooner, before actions are taken by the Council on Public Higher Education that might lead to any substantive change in the education of medical care personnel or to legislative changes that might affect the delivery of medical care."*

The committee recommends the adoption and implementation of this resolution.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution BB

KMA Board of Trustees

WHEREAS, in 1969 the House of Delegates encouraged the development of a Physicians' Assistant Program at the University of Kentucky, and

WHEREAS, the Board of Trustees in 1973 and 1974 received progress reports on this Program, and

WHEREAS, the University of Kentucky has now graduated its first class of clinical associates; be it therefore

RESOLVED, that the Kentucky Medical Association endorses the concept of physicians' assistants working under the direction of practicing physicians; and be it further

RESOLVED, that the Legislative Committee be requested to assist in the development and passage of legislation to bring about certification and full utilization of physicians' assistants in Kentucky.

Recommendations, Reference Committee No. 2

The Reference Committee reviewed Resolution BB —Physicians Assistants, introduced by the KMA Board of Trustees, receiving considerable in-put from a number of physicians. The committee endorses Resolution BB. The committee approves the concept of credentialing of allied medical personnel and urges the Legislative Committee to become familiar with BR 239, a bill recommending standards of credentialing for certain allied medical personnel.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded from the floor.

The Chairman of the Board was then recognized and explained the Board's feeling that BR-239 was not before the Reference Committee for discussion. Inasmuch as the Board of Trustees had not reviewed BR-239, the Board felt that to take any stand would be unwise at the present time.

Therefore, to be very clear about what was being supported, Doctor Parks made a substitute motion, on behalf of the Board of Trustees, that the following sentence be deleted from the Reference Committee's report: "The committee approves the concept of credentialing of allied medical personnel and urges the Legislative Committee to become familiar with BR-239, a bill recommending standards of credentialing for certain allied medical personnel," and further that Resolution BB be adopted without further comment.

The substitute motion was seconded and carried.

Mr. Speaker, I move the adoption of the report of the Reference Committee No. 2 as a whole, as amended.

The motion was seconded and carried.

Mr. Speaker, I would like to thank the members of this Reference Committee for their help in consideration of the matter brought before this committee and Mrs. West for her help in preparing the report.

REFERENCE COMMITTEE NO. 2

Nelson B. Rue, M.D., Bowling Green, Chairman
Colby N. Cowherd, M.D., Lexington
Harold D. Haller, M.D., Louisville
Cecil D. Martin, M.D., Carrollton
Don R. Stephens, M.D., Cynthiana

REFERENCE COMMITTEE NO. 3

Earl P. Oliver, M.D., Scottsville, Chairman

Reference Committee No. 3 considered the following reports and resolutions:

18. Report of the Maternal Mortality Study Committee
22. Report of the Committee on Occupational Health
25. Report of the Physician-Attorney Liaison Committee
28. Report of the Committee on National Legislative Activities
29. Report of the Committee on State Legislative Activities
35. Report of the Committee on Environmental Quality
36. Report of the KMA Liaison on Cults to the AMA
42. Report of the Committee on Physicians' Health
1. Report of the President; Beginning with the last paragraph on Page 1.2 to the last paragraph on Page 1.4, all of which pertains to liability insurance, **only**

   Beginning with the paragraph on Page 1.9, starting with "The State Legislature . . ." through the end of Page 1.10, pertaining to legislative matters, **only**

   All of Page 1.15 and the first paragraph of Page 1.16, pertaining to KEMPAC and legislative matters, **only**
5. Report of the Chairman, Board of Trustees; Pages 5.13-5.16, pertaining to the Ad Hoc Committee on Professional Liability Insurance, as well as the legislative proposal you have received on liability insurance, **only**

Resolution D—Malpractice Insurance (Allen County Medical Association)

Resolution I—Non-Discovery Statute and Immunity of Medical Review Board Personnel and Records (W. Neville Caudill, M.D.)

Resolution N—H.R. 2223—Copyright Law (Jefferson County Medical Society)

Resolution O—Reporting Claims (Campbell-Kenton County Medical Society)

Resolution P—Review of Professional Activity (Campbell-Kenton County Medical Society)

Resolution Q—Punitive Damages (Campbell-Kenton County Medical Society)

Resolution R—Expert Witnesses (Campbell-Kenton County Medical Society)

Resolution S—Cancellation of Insurance (Campbell-Kenton County Medical Society)

Resolution U—Opposition to National Health Planning and Resource Development Act of 1974 (Fayette County Medical Society)

Resolution W—Medical Liability Insurance (Campbell-Kenton County Medical Society)

Report of the Maternal Mortality Study Committee

The Kentucky Medical Association Maternal Mortality Committee met twice during the last Associational year, in September, 1974, and May, 1975. Eighteen cases were discussed and classified. Essentially the operation of the Committee continues as reported last year. As stated in the report last year, it is unfortunate that the physicians involved in the management of the cases reviewed do not present themselves before the Committee to explain details and questions that often occur. We still feel it desirable that some method be established to effect attendance by the physician whose case is being discussed.

Each month a case is published in *The Journal of the Kentucky Medical Association* along with the comments of the Committee.

John W. Greene, Jr., M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Maternal Mortality Study Committee was reviewed and discussed by this committee. The committee recommends that the Chairman of the Maternal Mortality Study Committee formulate a plan by which the needed case information may be provided by mail or other suitable method.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the Committee on Occupational Health

The Committee on Occupational Health held one formal meeting during this Associational year. The committee's main activities centered around helping to sponsor the annual seminar of the Kentucky Occupational Medical Association. This seminar, which was held at the Ramada Inn, Louisville, on May 9 and 10, was attended by more than 100 physicians, nurses and other allied health groups who are involved on at least a part-time basis in occupational medicine.

The Committee has attempted to coordinate its efforts with the Kentucky Department of Labor and stay as well informed as possible on all of the OSHA requirements that are such an integral part of the day-to-day activities in any manufacturing plant that must abide by these regulations.

Due to the continuing concern from the standpoint of medicine about work-related diseases, we feel that the thrust of this Committee in the future should be in the area of helping to provide as much information as possible in the medical profession regarding the possible problems that arise in various manufacturing facilities that constantly use toxic materials that can have a deleterious effect on the employees who come in contact with them. We feel it is imperative that the medical profession be acutely aware of these problems and lend whatever expertise is possible to the solving of these problems.

I am appreciative of the continuing efforts of the

members of the Committee on Occupational Health, and we are hopeful that the next Associational year will see us more deeply involved with the many health-related organizations throughout the State that can be of assistance to us in helping to overcome some of the problems that we are facing in this very specialized field.

John E. Trevey, M.D., Chairman

Recommendations, Reference Committee No. 3

The report of the Committee on Occupational Health was reviewed by the committee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Physician-Attorney Liaison Committee

The Physician-Attorney Liaison Committee is composed of three physicians appointed by the Kentucky Medical Association and three attorneys appointed by the Kentucky Bar Association with co-chairmen representing each association. The Committee serves as a liaison between the two professions in the discussion of matters of mutual concern and serves as the referrral body on problems that arise under the Interprofessional Code.

The Physician-Attorney Liaison Committee has reviewed in detail the worthiness of existing screening panels and has previously recommended that screening panels reviewed were not feasible in Kentucky. Currently the subject of a medical-legal review committee or board is being restudied, and the concept is being recommended to the boards of both associations.

The Interprofessional Code, which was adopted in 1973, has been studied in detail by the Committee, and recommendations for revisions have been made to the KMA Board of Trustees.

The Committee continued to study problems relating to professional liability insurance. In February a "Questionnaire on Professional Liability Insurance," composed of nine questions, was mailed with the *"Communicator"* to all KMA members. Forty percent of the questionnaires were returned indicating much interest. Results were published in the May, 1975, issue of *The Journal of the Kentucky Medical Association.*

Responses to the questionnaire revealed that:

1. Almost all of those responding (98.4%) are covered by professional liability insurance.

2. Over 63% of the respondents are insured with the Medical Protective Company.

3. Over 62% of those covered also have excess or "umbrella" type coverage. Of the 62%, 85.8% had coverage of $1 million.

4. 96% of the physicians have a base coverage of $100,000/$300,000 or higher.

5. When asked whether they had been refused liability insurance within the last three years, 4.5% responded yes.

6. 10.9% and 12.5% of the physicians have been named as a co-defendant of a suit with a hospital and/or individually, respectively.

7. Premiums range from $100 to $10,000. However, 53.8% of the premiums fall between $100-$1000, while less than 10% are higher than $3,000.

It should be mentioned that total responses for this survey were 1,233, and all questions were not answered by all respondents.

In response to the proposal of a KMA-sponsored liability insurance program, 66.91% favored the possibility of such a program; 29.66% were undecided, but felt they would probably go along with such a program. There were 33 absolute "no" responses for a percentage of 3.43.

Committee members have discussed various legislative areas which might be explored and what effect Section 54 of the Constitution of the Commonwealth of Kentucky would have on these areas. It was agreed that a joint underwriting association would serve to solve some of the problems, but this would be only a stop-gap solution and that longer-range planning must include other legislative changes.

The attorney members pointed out that to put a ceiling on the recovery which can be awarded to a patient is unconstitutional in Kentucky.

The following legislative possibilities were also discussed:

1. Excluding duplication of payments made to claimants.

2. Rectifying statutes of limitations applied to minors.

3. Limitation and review of contingent fees.

4. Eliminating the ad damnum clause in lawsuits.

5. Making confidential all records and testimony given in medical peer review procedures.

6. Requiring plaintiff to provide notice of intent before actually filing a suit giving time to come to an understanding.

7. Medical review board to determine the merits of claim.

8. Establishing an excess fund for payment of large awards in excess of insurance coverage.

9. Proposing a statute requiring any claim as to guaranty of specific medical results to be put in writing and to be signed by the physician against whom the claim is made.

10. Formation of a professional review board to review every settlement or judgement against a health care provider to determine his fitness to practice.

11. Advance payment to claimant by insurance carrier without prejudice to defendant.

12. Requirements on qualifications as expert witnesses.

13. Reporting of amount of each claim paid by insurance companies.

14. KMA-backed insurance company for medical professional liability insurance.

15. Standardized forms for informed consent.

16. Elimination of injury alone as a presumption of the defendant's negligence.

It was pointed out that national legislation regarding professional liability insurance is quite possible, and that a Federal law would override state laws, even Section 54 of the Kentucky Constitution.

The attorney members agreed that when KMA has some definite legislative proposals, they, as Committee members, would provide professional assistance.

I would like to express my personal appreciation to the Committee members representing both associations for their attendance, interest, participation and cooperation.

Thomas M. Marshall, M.D., KMA Co-Chairman

Recommendations, Reference Committee No. 3

The Report of the Physician-Attorney Liaison Committee was reviewed and discussed at length and the committee wishes to commend the Physician-Attorney Liaison Committee for their long hours and extensive research concerning the problems relating to liability insurance coverage and legislative possibilities pertaining to improving the physicians' coverage by malpractice insurance at a more reasonable fee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee on National Legislative Activities

The KMA Committee on National Legislative Activities met only once during the Associational year. Under the new committee structure state and national activities were divided for the first time following action of the KMA Board. For many years the responsibility of the KMA Committee on National Legislative Activities has been to accept responsibility for the KMA Annual Washington Dinner.

Normally, in this final report the Committee Chairman has been able to report to the membership the results of our annual visit with our Senators and Congressional Delegation. In 1975, due to the many meetings normally scheduled, the many extra meetings created by our liability insurance problems, and other extraneous factors, it was impossible to hold the Annual Washington Dinner until July 15, 1975. Because of this and the deadline for submitting final committee reports, the Committee on National Legislative Activities will not be able to include in this report the results of our Washington Dinner.

As Chairman of the Committee, I feel we may need to take an indepth look at the present format of our Washington trip with the idea in mind that three or four yearly visits by key officers and members of the KMA staff to Washington might be more effective at this time than our Washington Dinner. It has become continually more difficult to get participation by the members and since there is a constant flow of health and medical legislation out of Washington, the thought has occurred that possibly a more regular series of visits would be much more helpful to us at the state level. These thoughts will have to be discussed a great deal more in the upcoming Associational year, but they are mentioned as part of this final report due to the very small number of physicians who each year find it possible to make the trip to Washington for the annual dinner.

A resume of some of the more pressing national health legislation is set forth as part of this final report.

Following the first year of committee activities as a completely separate committee, we feel this is a worthwhile change and should be continued in the future.

CURRENT NATIONAL HEALTH LEGISLATION

H.R. 4005 **The Developmental Disab'l'ties Act Amendment of 1975:** Modifies and extends developmental disabilities programs.

H.R. 4114 To extend the National Health Service Corps Program.

H.R. 4115 **Nurse Training Act:** Extends programs of aid to students and schools of nursing and to certain other allied health professions.

H.R. 4925 **The Health Revenue Sharing and Health Services Act:** Extends programs of revenue sharing, aid to migrant health community mental health centers and community health centers.

H.R. 5236 **Rural Health Care Delivery Act:** Establishes an office of Rural Health to assist in the development of rural health care delivery systems.

H.R. 5515 To amend the PSRO law and related section of the Social Security Act in accordance with suggestions submitted by AMA.

H.R. 5545 **Medical Device Amendments of 1975:** Establishes categories of medical devices and requires premarket testing for certain devices.

H.R. 5546 **The Health Manpower Act:** Provides capitation grant assistance to medical schools and extends and modifies programs of aid to medical education.

H.R. 5679 **Variable Incentive Pay Amendments:** Authorizes equal opportunity for bonus pay for medical officers in the uniformed services.

H.R. 5970 **Emergency Health Insurance Extension Act:** Levies an excise tax upon health insurance policies to pay for continued coverage for the unemployed.

S. 1737 **Clinical Laboratories Improvement Act of 1975:** Extends Clinical Laboratory Act of 1967 to include labs previously exempt from Federal control including those in hospitals and physicians' offices.

David A. Hull, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on National Legislative Activities was reviewed and discussed by the committee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee on State Legislative Activities

The Committee on State Legislative Activities met once during the 1974-75 Associational year. During that meeting many of the legislative proposals which had been discussed by the Committee during the 1974 legislative session were reviewed with the thought in mind that some of this legislation would be revived and possibly reintroduced during the upcoming 1976 Kentucky General Assembly.

Some of the items discussed concern certification of radiological technologists, nondiscovery statutes, physicians' assistants legislation, legislation concerning a proposal that would place all licensing boards under one roof in Frankfort, legislation concerning public employees' negotiations and, of course, the major area of discussion evolved around liability insurance legislation and its many ramifications.

Since there was no General Assembly in Kentucky this year, most of the Committee's work involved meeting with the various interim committees in which we have specific areas of concern. The committees of the Kentucky General Assembly that review most medical or health oriented legislation are the Committee on Health and Welfare and the Committee on Business Organizations and Professions. Both of these committees were extremely active during the past year and for that reason, representatives of KMA attended a great many interim committee sessions in Frankfort. Also, because of the tremendous physician concern regarding costs of liability insurance, meetings were held with the Interim Committee on Insurance, which is reviewing possible changes in these very important areas.

It will be the responsibility of the Committee on State Legislative Activities to attempt to carry out the wishes of the Association in the field of liability insurance legislation. When a final legislative proposal has been prepared, we are hopeful that the Committee will be able to work effectively with the proper committees of the legislature to help prepare legislation which will, in the final ultimatum, relieve the very serious problems which face the profession and the public in the area of increasing liability insurance premiums. It is our feeling that it will take a very concerted effort on the part of all interested groups if effective legislation is to be passed during the 1976 General Assembly. We urge the active participation of the entire membership of the Kentucky Medical Association in becoming familiar with the legislative proposals and in doing everything possible to alert all interested persons of the various medical crises which could face Kentucky unless proper remedial legislation is passed in 1976.

We laud the efforts of the members of the Committee on State Legislative Activities and wish to take this opportunity to express our appreciation for its efforts. We are well aware that the year ahead will be one that will call for a maximum effort on the part, not only of the Committee, but of each and every physician within the Association.

John P. Stewart, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on State Legislative Activities was reviewed by the committee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee on Environmental Quality

In its first meeting of the year the KMA Committee on Environmental Quality discussed and set forth some desirable goals for the year. Mainly, these goals were to become a more active and functioning committee, with the ideal of possibly becoming an advisor to the State Department of Natural Resources and Environmental Protection as pertaining to health matters in the Commonwealth of Kentucky. Requests by letter were to be sent to each medical society in the State for input from their societies on local environmental health problems which could then be sent to this Committee for further discussion and when necessary, to bring the matter before the Board of Trustees of KMA. As of this report, the input and response from the various county medical societies has been poor and disappointing.

A further goal was to assume more responsibility in environmental health matters by attending the various meetings of the State Environmental Quality Commission and to attend, when possible and feasible, the various interim legislative hearings pertaining to environmental health problems of interest to the committee members.

The first meeting of the KMA Committee on Environmental Quality with the Commissioner of the State Department of Natural Resources and Environmental Quality was held in the office of the Commissioner, the Honorable John S. Hoffman, in Frankfort. The Commissioner was very receptive to the desire of the Committee to function as an unofficial advisor to his department on matters of environmental health in this State. It is felt that the meeting was successful as a first of its kind and will lead to a mutual working relationship between the State Department of Natural Resources and Environmental Protection and the KMA Committee on Environmental Quality. There are plans to set up a joint meeting with this Department and the KMA Committee later this year to discuss areas of mutual concern and to better learn how the KMA Committee might function more effectively.

This Committee needs expansion of its participating membership with the addition of four to six additional members from other areas of the State of Kentucky. In addition, the number of yearly meetings of the Committee will be increased to at least four. There is much to be done in this state in the whole area of environmental quality. Much is being overlooked and neglected which needs immediate attention. The KMA Committee on Environmental Quality has shown increased interest and effort to become an active useful force as an important part of the KMA. This committee needs input from the practicing

physicians and from the various county medical societies in order to function more effectively as a needed voice in the field of environmental quality in the State of Kentucky. The state medical society and the many practicing physicians with their extensive background in the biological sciences are uniquely qualified to assume an increasing role as pertaining to environmental health matters within the State of Kentucky.

The Chairman wishes to express his appreciation to each Committee member for his untiring efforts and interest in making this Committee an important part of the Kentucky Medical Association, and to Mr. Jerry Mahoney for his greatly needed support in the function of the Committee.

L. James Black, Jr., M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Enviornmental Quality was reviewed and discussed by the committee. The committee approves the recommendation for increased membership on the Committee for Environmental Quality.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the KMA Liaison on Cults to the AMA

The Committee on Cults did not have occasion to meet in formal session during the 1974-75 Associational year. We are trying to keep as up to date as possible on activities in this field; particularly, as it deals with chiropractic, since we feel certain there will be much activity along those lines in the 1976 Kentucky General Assembly.

One of the problems which has confronted the Committee in attempting to keep our records up to date and to stay as aware as possible of new developments which might be of concern to us, is the fact that the American Medical Association has, for all practical purposes, ceased any activities in this area of endeavor. The AMA formerly handled such matters through its Investigation Department which no longer exists under the new AMA staff structure.

The Committee will be prepared to advise the KMA State Legislative Committee during the next General Assembly on all matters pertaining to cults.

Richard F. Park, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the KMA Liaison on Cults to the AMA was reviewed and discussed by the committee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee on Physician's Health

Although our Committee did not meet this year a report is appropriate to bring to the attention of the membership our responsibilities.

This Committee was established by the Association to help individual physicians who might suffer from disorders to the degree that their capacity to practice medicine is affected. The Committee is active only on a referral basis and its intent is to help the so-called "sick physician" who is unable to help himself.

We would urge any questions by the membership on our activities.

David L. Stewart, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Physician's Health was reviewed by the committee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the President

Section Pertaining to Legislative Matters Only

The State Legislature will convene for 60 days beginning in January. Medical liability for us will be a number one priority. Physicians' assistants certification is also important and there is the possibility that a medical examiners system will again be before us and appropriate certification for blood distribution is another significant item. Continuing appropriate funding of our two medical schools will also command our attention, and we must give this our supportive efforts.

In the past we have had a Key Man system from which we attempted to achieve organizational power. It's a simple system and it is easy to comprehend and each has been contacted in regard to his responsibility. Unfortunately, many who have agreed to accept this significant job have defaulted and left large areas in the Key Man pyramid blank. No one is so busy that they cannot give this simple task a top attention place in their time demand of things that must be done. More knowledgeable participation must be done by each of us and it is recommended that the leadership exert on-going efforts until each key man is working and affording himself meaningfully within this system. It is asking little and it does not require sacrifice. Much more will be accomplished if we develop this organizational concept into full fruition.

Let us turn to the national legislative scene. In most people's estimation National Health Insurance will be simmering on a low back burner or at least not on a high front burner for this session of Congress and perhaps through the next one. It does not have the political appeal that it once did, and it is rated no higher than 18th or 19th in most citizen's ideas of national dilemmas as has been determined by national pollsters. It will mean more dollar expenditure with an imposition of greater bureaucracy, greater inefficiency, greater disappointments to receivers, further reduction in quality care, more frustrations and antagonisms for both doctors and patients and these reasons will serve to constrain those in elected power. We must, however, stay alert, informed, and we must collectively work together at all organizational levels in order to deal with this

confrontation when it becomes more serious. There must be no silent voices in this c amor. We can ill-afford apathy, inertia or immobility amongst our membership. Because of the complexities, all national health legislation has been intensely studied by our national professional staff and by physicians who have had continuing and long exposure to such types of proposals. Our national organization is equipped as are few others to follow, pursue and determine what is good and bad for financing and delivering quality of health care.

We individual physicians do not have to hesitate in defense of the position of organized medicine in terms of health issues. Over 80 percent of legislative health proposals have our endorsement. Some of them have had their beginnings from physicians in the field and have been developed and refined by our national organization's abilities. Our positive record in health will surpass those of any organization in working with the elected membership of Congress.

When an issue does surface, however, we must become knowledgeable, understand first of all what medicine's position is, and why.

Recommendations, Reference Committee No. 3

The Report of the President, Beginning with the paragraph on Page 1.9, starting with "The State Legislature . . ." through the end of Page 1.10, pertaining to legislative matters, **on'y** (#1), was reviewed and discussed by the committee. We urge that every physician accepting Key Man responsibilities put his best effort forth in this obligation and we further urge each and every member of KMA to be active in upcoming medical legislation.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the President

Section Pertaining to KEMPAC and Legislative Matters Only

Let us turn now to our relationship with KEMPAC. Surely by this time, even the most deep cave dweller will have to realize our continuing abilities to practice medicine are continually intertwined and enveloped with politics and legislation.

Politics and legislation will decide the future of health care in this country. It will not be decided in the halls of science despite our continuing progress and expertise. Nor will it be solved in the halls of our hospitals or of our offices. Think of the explicitness of the current involvement. Hear the repetitious, cascading, drumming, crescendoes of those enactments that are now blanketed upon our profession. Listen to a few in this rhythmical beat of continuing enshroudment by legislative fiat, Medicare, Medicaid, National Health Insurance, Comprehensive Health Planning, Health Public Utility bills, PSRO, HMO. We must possess a demonstrable thrust and force in the political arena. For effective legislation, you must have appropriate politics. Such is the system by which our country is propelled. For us to deny ourselves the opportunities of citizenship which all proclaim so necessary would be an assignment to oblivion for which we could never speak with any justification.

We must continually evaluate the necessity for financial support to see that our political arm, KEMPAC, does not have to take a secondary position because of the lack of opportunity to educate and administer for us. We need to also look closely to the organization itself as to its Congressional districts strength, and perhaps to offer directions of enhancement in the larger cities and in the appropriate areas to have functioning political cadres formed.

KEMPAC must always be bipartisan in its nature.

Many good things have come from the women's participation in KEMPAC, and these are to be continually nourished and enlarged.

To see evidence of the success of the PAC activity, both in the state and the nation, observe the many other groups and professions that are now busily forming PAC groups.

AMPAC and KEMPAC have now been functioning since 1961. At neither level has there been a legal question that has been of a problem. At no time has any of our political activities been inappropriate judgments. It has been an honorable service both to our profession and to the country, and it must continue to grow and to serve.

Recommendations, Reference Committee No. 3

The Report of the President; All of Page 1.15 and the first paragraph of Page 1.16, pertaining to KEMPAC and legislative matters, **only** (#1), was reviewed and discussed by the committee. The committee wishes to urge KMA members to become Sustaining KEMPAC members.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Resolution N

Jefferson County Medical Society

WHEREAS, the present Bill H.R. 2223, which is before the House Judiciary Committee, would cause great restriction in the present method of disseminating scientific information at a moderate cost, and

WHEREAS, in certain areas in Kentucky and other states, physicians do not have ready access to complete medical libraries. The people in these areas would be directly penalized under H.R. 2223 because information from the major centers of learning could no longer be forwarded to their physician about unusual problems nor could the physicians be provided new medical knowledge, and

WHEREAS, medical research in the war against illnesses such as heart disease, cancer and stroke would be impeded by these new restrictions on the free flow and exchange of medical and scientific knowledge, and

WHEREAS, medical students and their teachers would be hindered in the preparation of teaching materials and the acquisition of a data base for

future reference of improving patient care, and

WHEREAS, the publishers of scientific journals in the United States and abroad pay no royalty to the authors for the manuscripts that are published in their respective journals which disseminate the results of current medical and scientific research, and

WHEREAS, a vote of support of H.R. 2223 would, in essence, relegate the health needs of the people to a position of secondary importance to selfish, financial interests of segments of the publishing industry, and

WHEREAS, in the proposed H.R. 2223, Sub-Section 108-Limitations on Exclusive Rights: reproduction by libraries and archives, (g) (2. "Engages in the systematic reproduction or distribution of single or multiple copies or phonorecords of material described in Sub-Section d.") The word "systematic" must be removed from the law to correct the undue restrictions, therefore be it

RESOLVED, that the Kentucky Medical Association use its influence in the House of Representatives and the House Judiciary Committee to remove the word "systematic" from H.R. 2223, Sub-Section 108(g) (2) by contacting the members of Congress from Kentucky and those on this committee explaining that to correct this Bill will avoid great damage to the unhindered flow of information among hospital libraries and physicians, and the scientific community.

Recommendations, Reference Committee No. 3

Mr. Speaker, the committee reviewed and discussed Resolution N—H.R.2223—Copyright Law, introduced by Jefferson County Medical Society, and its revised version which is:

"WHEREAS, in the proposed H.R. 2223, Section 108—Limitations on Exclusive Rights: Reproduction by libraries and archives, subsection (g) (2). "Engages in the systematic reproduction or distribution of single or multiple copies or phonorecords of materials described in subsection (d)." The subsection (g) (2) must be removed from the law to correct the undue restrictions; therefore be it

RESOLVED, that the Kentucky Medical Association use its influence in the House of Representatives and the House Judiciary Committee to remove subsection (g) (2) from Section 108 of H.R. 2223, by contacting the members of Congress from Kentucky and those on this committee explaining that to correct this Bill will avoid great damage to the unhindered flow of information among hospital libraries and physicians, and the scientific community."

The committee approved the adoption of the revised version of Resolution N.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution U

Fayette County Medical Society

RESOLVED, that the Kentucky Medical Association follow the advice of the AMA Board of Trustees and reaffirm its support for AMA legal counsel to file the suit to challenge the National Health Planning and Resource Development Act of 1974; and be it further

RESOLVED, that copies of this resolution be sent to the AMA Board of Trustees and each Kentucky member of the U.S. Senate and the U.S. House of Representatives.

Recommendations, Reference Committee No. 3

The committee reviewed and discussed Resolution U regarding opposition to National Health Planning and Resource Development Act of 1974, introduced by Fayette County Medical Society. The Committee recommends adoption of Resolution U.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution W

Campbell-Kenton County Medical Society

WHEREAS, the availability of medical care to the citizens of Kentucky is a prime concern to the Kentucky Medical Association and its members, and

WHEREAS, continued escalation in the cost of professional liability insurance whether such costs are absorbed by the physician or passed through to the patient, affects the availability of medical care adversely, and

WHEREAS, increased professional liability premiums are generated not by an increase in malpractice but by mounting defense cost and increasingly liberal awards and increasingly liberal judicial interpretation, and

WHEREAS, the Kentucky Medical Association has approved proposals to provide legislative relief for these imbalances, therefore be it

RESOLVED, that the primary commitment of the Kentucky Medical Association and its physician members is to the essential medical needs of the people of this State and be it further

RESOLVED, that the Kentucky Medical Association recognizes that it is the inalienable right of physicians to decide for themselves the circumstances under which they can or cannot continue to practice their profession and be it further

RESOLVED, that the Kentucky Medical Association recognizes that physicians are entitled to use all available legal means without jeopardizing the medical care of their patients, to protest when intolerable and unwarranted burdens are placed upon their patients, the Association or its members, and be it further

RESOLVED, that the Kentucky Medical Association continue to study the effects of changing socio-economic conditions on the availability of physicians to practice medicine, and be it further

RESOLVED, that upon conclusion of business of the second meeting of the 1975 House of Delegates of the Kentucky Medical Association, this House of Delegates shall not adjourn but shall sit and recess until the adjournment of the 1976 session of the Kentucky General Assembly, and be it further

RESOLVED, that this House of Delegates shall reassemble upon 48-hour call of the Speaker of this House, upon request of the Governor of Kentucky, or of the Kentucky General Assembly to consider and advise about any matter they deem germane to the professional liability situation and be it further

RESOLVED, that this House shall reconvene upon the 48-hour call of the Speaker recommended by the President of the Society or 30 members of the House of Delegates or upon report of the legislative committee that an empasse has been reached in the legislative process or at least by the first day of February 1976 in order to review any measures passed by the Kentucky Genereal Assembly concerning malpractice legislation and related topics.

Recommendations, Reference Committee No. 3

The committee reviewed and discussed Resolution W—Medical Liability Insurance (Campbell-Kenton County Medical Society) and the proposed amendment. The last two resolves on Page two are amended to read as follows:

"RESOLVED, that this House of Delegates pledge its cooperation and availability to the Governor and the General Assembly of Kentucky in considering the Medical Liability problem and reaching a solution that will allow uninterrupted medical care for our patients; and be it further

RESOLVED, that this House shall stand in recess at the end of this meeting and shall reconvene upon the 48-hour call of the Speaker if recommended by the President of the Association, or 30 members of the House of Delegates, or upon report of the legislative committee that an empasse has been reached in the legislative process and no later than the 14th day after the end of the legislative session in order to review any measures passed by the Kentucky General Assembly concerning malpractice legislation and related topics; and if not so called, the House stands adjourned."

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded from the floor.

The KMA Parliamentarian, Bennett L. Crowder, II, M.D., was then recognized, who stated it was the desire of the KMA Board to recommend that the following Substitute Resolution be introduced, which was a consolidation of Resolution W and the amendments made to it by the Reference Committee:

RESOLVED, that the primary commitment of the Kentucky Medical Association and its physician members is to the essential medical needs of the people of this State; and be it further

RESOLVED, that the Kentucky Medical Association recognizes that it is the inalienable right of physicians to decide for themselves the circumstances under which they can or cannot continue to practice their profession; and be it further

RESOLVED, that the Kentucky Medical Association recognizes that physicians are entitled to use all available legal means without jeopardizing the medical care of their patients, to protest when intolerable and unwarranted burdens are placed upon their patients, the Association or its members; and be it further

RESOLVED, that the Kentucky Medical Association continue to study the effects of changing socioeconomic conditions on the availability of physicians to practice Medicine; and be it further

RESOLVED, that upon conclusion of business of the second session of the 1975 House of Delegates of the Kentucky Medical Association, this House of Delegates shall not adjourn; and

RESOLVED, that this House of Delegates pledge its cooperation and availability to the Governor and the General Assembly of Kentucky in considering the Medical Liability problem and reaching a solution that will allow uninterrupted medical care for our patients; and be it further

RESOLVED, that this House shall not adjourn at the end of this session and shall reconvene upon the 48-hour call of the Speaker if recommended by the President of the Association, or 30 members of the House of Delegates, or upon report of the Legislative Committee that an empasse has been reached in the legislative process; and be it

RESOLVED, that at the end of this business session of the 1975 KMA House of Delegates Annual Meeting, the House shall "Stand in Adjournment" and that if another session be necessary the House of Delegates shall, by direction of the Speaker (as outlined above), "Meet in Adjourned Session" on a 48-hour notice to the Delegates. Further, the 1975 House of Delegates takes cognizance of the fact that because of the importance of the Medical Liability issue, the House of Delegates may need to be called upon to "Meet in Adjourned Session" on more than one occasion and shall do so as directed by the Speaker (under the same conditions as outlined above). Be it further

RESOLVED, "The Special Order" for any "Adjourned Session" of the 1975 KMA House of Delegates shall be for the sole purpose of discussing the Medical Liability issue. In such a session, the House of Delegates will discuss in "Informal Consideration" any problem areas regarding the Medical Liability issue; and be it further

RESOLVED, that the "Meeting in Adjournment" shall continue until at least two weeks after the Kentucky General Assembly has "Adjourned Sine Die." Lastly, be it

RESOLVED, that if no "Adjourned Session" is called, this Annual Meeting of the 1975 House of Delegates of the Kentucky Medical Association will automatically be "Adjourned" two weeks after "The Adjournment Sine Die" of the Kentucky General Assembly.

A substitute motion was then made that the above Substitute Resolution be adopted and implemented. Motion carried.

Report of the President

Section Pertaining to Professional Liability Insurance Only

Now turn to the foremost issue for us of this time. It is medical liability insurance. Does it seem strange that we are asking for the right to serve people without unduly penalizing them or ourselves while at the same time, making every effort to see we are not irresponsible. There are many interesting facets of medical liability—there are basic dissatisfactions in some sectors. Anyone can sue anyone for any amount about anything and while the mind can teetor-tottor on all these broad avenues in this age of consumerism, there are many revealing incongruities. For example, from settlements, merely 16 percent of the awarded dollar gets to the patient. Our profession is at its greatest level of expertise in the care of people, but it is our experts most highly trained in narrow fields of specialization who are in the greatest peril and who are highest risks in the malpractice Medical Liability category. Physicians wish and want in every possible way to care well for each patient in his plight and agony when he becomes ill. At the same time, we have to continually practice costly defensive medicine usually upon those who are only briefly ill or slightly injured, when they may turn on us. There is a loud cry in the land for we to police ourselves, but who is demanding responsibility from attorneys, open and public accountability from insurance companies? Where are the demands for retribution against the frivolous and avaricious person who is a pseudo-patient? But, alas, we will not solve our problems by arbitrary denunciations or shoutings. It can only be done in a positive atmosphere and by positive proposals. There are four basic groups involved—the patient, the physician, the insurance company and the lawyer.

Most are in common agreement that the answer is through appropriate state legislation enactment. Federal statutes will not solve this problem because of the wide diversity of circumstances that occur in each state. Certainly New York's problems are considerably different from Montana's; California would have little in common with Mississippi. Most feel more confortable dealing with problems of any magnitude at home with those who they know best. Here is a classic example for an opportunity to do just that.

The Governor has appointed a special committee to serve as a seek and search body for appropriate recommendations to the Legislative Research Commission which will then in turn make representations to the Legislature when it convenes in January, 1976. We have had two excellent representatives from the KMA serving on this committee and they have represented us well—Tom Marshall and Ballard Cassady. In a separate handout you will see the current presentations to that committee. They will not be read to you at this time, but you should and must dwell upon them, become familiar with them, as each of us is a resource person for the discussions that are sure to come when the Legislature convenes. Some of them are absolutely basic to achieve a reasonable resolution—some are more important than others—they are all part of our package, and it is recommended to each and every one of you. The possibility of others being added will remain under consideration as each state is trying to pass curative legislation. From their successes and failures there may be other measures that will have significance for us.

Finally, we must remember any solutions of legislation must be fair and equitable to all concerned. If it should become evident that unreasonable legislation in terms of patient protection or a physician's practice that will force irresponsible costs or methods or punitive restrictions upon us that are not in keeping with quality health care, then we must turn to whatever avenues our strength of totality makes possible.

Report of the Chairman, Board of Trustees

Section Dealing with the Report of the Ad Hoc Committee on Professional Liability Insurance Only

At the February 26 meeting of the KMA Executive Committee it was decided that an Ad Hoc Committee on Professional Liability Insurance be formed composed of members of the Quick Action Committee, the Chairman of the Committee on State Legislative Activities, the physician Co-chairman of the Physician-Attorney Liaison Committee and the KMA legal counsel as an ex-officio member.

Members of this Committee have been in perpetual activity in an effort to relieve the crisis situation and to eventually resolve the problem through a proposed legislative package. The Committee members have held regular committee meetings in order to outline proposed legislation. Also, an open hearing was held for all KMA members so that various statewide problems and possible solutions could be discussed. Individual members of the Committee have held sessions with AMA staff members, insurance company representatives and with the state Insurance Commissioner. Invited to all meetings of the Committee is Ballard Cassady, M.D., who serves with me as a member of the Governor's Committee on Hospital and Physicians Professional Liability Insurance.

The Committee has examined in detail legislative packages from other states. Reams of material have been read and evaluated in an effort to determine what would be most desirable for Kentucky. With the many proposals that are suggested, the Committee is interested in preparing a package that will include many of the following ideas:

1. **A medical liability panel**—This calls for submission of all medical liability claims to an expert panel prior to filing of suit.

2. **A professional review board** to review all malpractice claims. The names of all providers against whom settlements are made or judgments rendered on professional liability claims would be referred to the professional review board.

3. **Limitation on judgments**—This would be a proposal that judgments in medical professional

liability cases cannot exceed the sum of $500,000 (a patient must voluntarily accept this provision before it would be binding).

4. **Elimination of the ad damnum clause**—This would provide that pleadings would ask for a judgment in a fair and equitable amount without a demand for a specific sum being permitted.

5. **Limitation on contingent fees**—This would limit contingent fees to a reasonable sliding scale for medical professional liability cases.

6. **Statute of Limitations**—This would provide that the discovery period applicable to minors would run no later than a minor's seventh birthday.

7. **Requirements for expert witnesses**—This would limit expert witnesses to physicians licensed to practice in Kentucky or in contiguous bordering states and to physicians who have practiced a pertinent specialty in one of these states during the year preceding the date on which the alleged injury occurred.

8. **Joint underwriting association**—This would require all carriers of casualty insurance to share the risk of underwriting medical professional liability insurance.

9. **A physician-owned insurance company**—This would authorize the Kentucky Medical Association to incorporate and conduct a private insurance company for the writing of medical professional liability insurance.

10. **State participation in an insurance pool**—This calls for the establishment of an excess fund to be administered by the State of Kentucky and to be funded from tax revenues and/or assessments on health care providers.

11. **Confidentiality of records**—This provision would make confidential all records presented in medical peer review procedures.

12. **Reporting of insurance claims by carriers**—This would require each carrier writing medical professional liability insurance in Kentucky to report to the State Insurance Commissioner the nature and amount of each professional liability insurance claim paid.

13. **Notice of Intent**—This would require a claimant to give to the defendant notice of the claim at least 90 days prior to filing suit.

14. **Res ipsa loquitur**—This would provide that injury alone does not raise a presumption of the defendant's negligence.

15. **Statute of Frauds**—Any claim of specific medical results must be put in writing and signed by the physician making the claim. No liability shall be imposed on any health care provider on the basis of an alleged breach of contract unless contract is set forth in writing and signed by the provider.

16. **Collateral Source provision**—This would require crediting against the amount of judgment in a medical professional liability suit any collateral insurance received by the plaintiff for those losses which are the basis for the suit.

17. **Advance payment provision**—This would permit partial advance payments to claimants by insurance carriers without prejudice to defendants and would not be admissible in court proceedings.

All the above are only considerations of a package to be presented to the 1976 session of the Kentucky General Assembly. Some are obviously more important than others, and some have better chances of passage than others, but all would help reduce the problem of professional liability insurance availability. The members feel the most important tool in solving the professional liability insurance problem is proper legislation. The Committee members also feel this is a problem to be handled at the State level and not by the Federal Government.

Thomas M. Marshall, M.D., Chairman

Legislative Proposals on Professional Liability

I. *Legislation Affecting Number and Size of Medical Professional Liability Claims and Awards.*

AN ACT Relating to Medical Professional Liability.

Be It Enacted by the General Assembly of the Commonwealth of Kentucky:

A new Chapter of the Kentucky Revised Statutes is Created to Read as Follows:

A. Medical Professional Liability Panel

Section 1. A new section of KRS Chapter_____ is created to read as follows:

No action against a licensed physician in tort or for breach of contract based on medical services rendered, or which should have been rendered, may be commenced in any court of this state before the claimant's proposed complaint has been presented to a medical review panel established pursuant to this chapter and an opinion is rendered by the panel.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

Except as provided in section 2(e), the medical review panel shall consist of one (1) attorney and three (3) physicians who hold unlimited licenses to practice medicine. The attorney shall act in an advisory capacity and as chairman of the panel, but shall have no vote. The medical review panel shall be selected in the following manner:

(a) All physicians engaged in the active practice of medicine in this state, whether in the teaching profession or otherwise, who hold a license to practice medicine, shall be available for selection.

(b) Each party to the action shall have the right to select one (1) physician and upon selection, said physician shall be required to serve. The two (2) physicians thus selected shall select the third physician panelist.

(c) Where there are multiple plaintiffs or defendants, there shall be only one (1) physician selected per side. The plaintiffs whether single or multiple, shall have the right to select one (1) physician and the defendant, whether single or multiple, shall have the right to select one (1) physician.

(d) A panelist so selected shall serve unless for good cause shown he may be excused. To show good cause for relief from serving, the panelist shall be required to serve an affidavit upon a judge of a

court having jurisdiction over the claim. The affidavit shall set out the facts showing that service would constitute an unreasonable burden or undue hardship. The court may excuse the proposed panelist from serving.

(e) If there is only one (1) party defendant, other than a hospital, two (2) of the panelists selected shall be from the same class of health care provider as the defendant.

(f) Within ten (10) days after notification of a proposed panelist by the plaintiff, the defendant shall select a proposed panelist.

(g) Within ten (10) days of any selection, written challenge, without cause, may be made to the panel member. Upon challenge, a party shall select another panelist. If two (2) such challenges are made and submitted, the judge shall appoint a panel consisting of three (3) qualified panelists and each side shall strike one (1) and the remaining member shall serve. In the event the two physicians selected are unable to agree upon a third physician panelist, such selection will be made upon application by a judge of a court having jurisdiction over the claim.

(h) The parties may agree on the attorney member of the panel, or if no agreement can be reached, then the attorney member shall be drawn by lot from the list of attorneys qualified to practice and presently on the rolls of the Court of Appeals of the Commonwealth of Kentucky. Upon request the Clerk of the Court of Appeals shall draw five names at random from the list of attorneys and the parties shall then each strike two (2) names alternately with the claimant striking first until both sides have stricken two (2) names and the remaining name shall be the attorney member of the panel.

Section 3. A new section of KRS Chapter_____ is created to read as follows:

The evidence to be considered by the medical review panel shall be promptly submitted by the respective parties in written form only. The evidence may consist of medical charts, x-rays, lab tests, excerpts of treatises, depositions of witnesses including parties and any other form of evidence allowable by the medical review panel. Depositions of parties and witnesses may be taken prior to the convening of the panel. The chairman of the panel shall advise the panel relative to any legal question involved in the review proceeding and shall prepare the opinion of the panel as provided in section 6. A copy of the evidence shall be sent to each member of the panel.

Section 4. A new section of KRS Chapter_____ is created to read as follows:

Either party, after submission of all evidence and upon ten (10) days' notice to the other side, shall have the right to convene the panel at a time and place agreeable to the members of the panel. Either party may question the panel concerning any matters relevant to issues to be decided by the panel before the issuance of their report. The chairman of the panel shall preside at all meetings. Meetings shall be informal.

Section 5. A new section of KRS Chapter_____ is created to read as follows:

The panel shall have the right and duty to request all necessary information. The panel may consult with medical authorities. The panel may examine reports of such other licensed physicians necessary to fully inform itself regarding the issue to be decided. Both parties shall have full access to any material submitted to the panel.

Section 6. A new section of KRS Chapter_____ is created to read as follows:

The panel shall have the sole duty to express its expert opinion as to whether or not the evidence supports the conclusion that the defendant or defendants acted or failed to act within the appropriate standards of care as charged in the complaint. After reviewing all evidence and after any examination of the panel by counsel representing either party, the panel shall, within thirty (30) days, render one or more of the following expert opinions which shall be in writing and signed by the panelists:

(a) The evidence supports the conclusion that the defendant or defendants failed to comply with the appropriate standard of care as charged in the complaint.

(b) The evidence does not support the conclusion that the defendant or defendants failed to meet the applicable standard of care as charged in the complaint.

(c) There is a material issue of fact, not requiring expert opinion, bearing on liability for consideration by the court or jury.

(d) The conduct complained of was or was not a factor of the resultant damages, and, if so, whether the plaintiff suffered: (1) any disability and the extent and duration of the disability, and (2) any permanent impairment and the percentage of the impairment.

Section 7. A new section of KRS Chapter_____ is created to read as follows:

The filing of the request for review of a claim shall toll the applicable statute of limitations to and including a period of ninety (90) days following the issuance of the opinion by the medical review panel. The request for review of a claim under this chapter shall be deemed filed when a copy of the proposed complaint is delivered or mailed by registered or certified mail to the commissioner, who shall immediately forward a copy to each physician named as a defendant at his last and usual place of residence or his office.

Section 8. A new section of KRS Chapter_____ is created to read as follows:

Any report of the expert opinion reached by the medical review panel shall be admissible as evidence in any action subsequently brought by the claimant in a court of law, but such expert opinion shall not be conclusive and either party shall have the right to call, at his cost, any member of the medical review panel as a witness. If called, the witness shall be required to appear and testify. A panelist shall have absolute immunity from civil liability for all communications, findings, opinions and conclusions made in the course and scope of duties prescribed by this article.

Section 9. A new section of KRS Chapter_____ is created to read as follows:

Each member of the medical review panel shall be paid at the rate of $50 per diem, not to exceed a total of $500, for all work performed as a member of the panel exclusive of time involved if called as a witness to testify in court, and in addition thereto, reasonable travel and lodging expenses. Fees of the panel including travel expenses shall be paid by the side against whom the majority opinion is written. If there is no majority opinion, then each side shall pay one-half of the cost.

Section 10. A new section of KRS Chapter_____ is created to read as follows:

In any action for damages for personal injury or death against a licensed physician, whether based on tort or contract law or otherwise, a finding by the Medical Professional Liability Panel that the evidence does not support the conclusion that the defendant or defendants failed to meet the applicable standard of care shall be admissible as evidence to support a counterclaim by the defendant for damages for abuse of process in filing such action.

B. Reporting and Review of Claims

Section 1. A new section of KRS Chapter_____ is created to read as follows:

All medical professional liability claims settled or adjudicated to final judgment against a licensed physician shall be reported to the Commissioner of Insurance by the plaintiff's attorney and by the licensed physician or his insurer within sixty (60) days following final disposition of the claim. The report to the Commissioner shall state the following:

(a) nature of the claim;

(b) damages asserted and alleged injury:

(c) attorney's fees and expenses incurred in connection with the claim or defense;

(d) the amount of any settlement or judgment.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

(a) The Commissioner of Insurance shall forward the name of every licensed physician against whom a settlement is made or judgment is rendered under this chapter to the Kentucky State Board of Medical Licensure for review of the fitness of the licensed physician to practice his profession.

C. Limitation on Judgment

Section 1. A new section of KRS Chapter_____ is created to read as follows:

(a) The total amount recoverable for any injury or death of a patient on a medical professional liability claim against a physician may not exceed the sum of $500,000.

(b) A "qualified licensed physician" shall not be liable individually for an amount in excess of $100,000 on any claim of medical professional liability.

(c) Any amount due from a judgment or settlement which is in excess of the total liability of all liable "qualified licensed physicians" shall be paid from the patient's compensation fund pursuant to the provisions of section _____.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

For the purposes of this chapter, the term "qualified licensed physician" shall mean those licensed physicians who have filed with the Commissioner of Insurance proof of financial responsibility as provided by section _____ in the amount of $100,000, or more.

Section 3. A new section of KRS Chapter_____ is created to read as follows:

Every patient of a "qualified licensed physician", as a part of his contracting for health care services, shall be deemed to have accepted all of the provisions of this chapter and shall be bound thereby, unless he shall have filed, prior to the occurrence of the injury of which he complains, written notice to the contrary with the licensed physician.

Section 4. A new section of KRS Chapter_____ is created to read as follows:

In the event health care services are rendered under emergency circumstances, or a patient is under a disability preventing the acceptance of the provisions of this chapter, such patient shall be deemed upon the termination of the emergency situation or the termination of the disability to have accepted all of the provisions of this chapter unless he shall thereafter file, prior to the occurrence of any subsequent injury of which he complains, written notice to the contrary with the qualified licensed physician.

D. Limitation and Review of Contingency Fees

Section 1. A new section of KRS Chapter_____ is created to read as follows:

In any action for damages for personal injury or death, whether based on tort or contract law, or otherwise, no attorney representing any party to such action shall contract for, charge or collect on a contingent fee basis any fee for his services to such party in excess of the following limits:

(a) 50% on the first $1,000 recovered;

(b) 40% on the next $2,000 recovered;

(c) 33-1/3% on the next $47,000 recovered;

(d) 20% on the next $50,000 recovered;

(e) 10% on any amount recovered over $100,000; and

(f) where the amount recovered is for the benefit of an infant or incompetent and the action is settled without trial the foregoing limits shall apply, except that the fee on any amount recovered up to $50,000 shall not exceed 25%.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

No attorney shall enter into such contingent fee arrangement with his client without first advising the client of his right and affording the client an opportunity to retain the attorney under an arrangement whereby the attorney would be compensated on the basis of the reasonable value of his services.

Section 3. A new section of KRS Chapter_____ is created to read as follows:

Such contingent legal fee shall be computed on the net sum recovered by the client after deducting disbursements made in connection with the institution and prosecution of the client's claim and litigation.

Section 4. A new section of KRS Chapter _____ is created to read as follows:

The contingent legal fee within the permissible maximum limits shall include legal services rendered on any appeal or review or on any retrial, but this shall not be deemed to require an attorney to take an appeal.

Section 5. A new section of KRS Chapter_____ is created to read as follows:

If, at the conclusion of any such action for damages, an attorney considers that the contingent fee within such maximum limits to be insufficient he may apply to the court, with written notice to the client, for an increase in the fee, which the court after a hearing may grant in such amount, if any, as is deemed reasonable in all of the circumstances.

Section 6. A new section of KRS Chapter_____ is created to read as follows:

In any action in which an attorney is compensated on the basis of a contingent fee, the attorney shall, promptly after the receipt by him or his client of any settlement or award in such action, file with the court a detailed and verified accounting of all receipts and disbursements in connection with the institution and prosecution of the litigation and the payment of the settlement or award.

II. *Legislation Affecting Procedural Remedies.*

A. Confidentiality of Records

Section 1. A new section of KRS Chapter_____ is created to read as follows:

(a) Neither the proceedings nor the records of organized committees of medical staffs in hospitals having the responsibility of evaluation and improvement of the quality of care rendered in the hospital, nor medical review committees of local medical societies, nor Professional Service Review Organizations and committees, shall be subject to discovery. No person in attendance at the meeting of any such committee shall be required to testify as to what transpired thereat.

(b) The prohibitions contained in this section shall not apply to any such committee if any person serves upon the committee when his own conduct or practice is being reviewed.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

(a) There shall be no monetary liability on the part of, and no cause of action for damages shall arise against, any member of a duly appointed committee or a state or local medical society, or duly appointed member of a committee of a medical staff of a licensed hospital (provided the medical staff operates pursuant to written by-laws that have been approved by the governing board of the hospital), for any act or proceeding undertaken or performed within the scope of the functions of any such committee which is formed to maintain the professional standards of the society established by its by-laws, if such committee member acts without malice, has made a reasonable effort to obtain the facts of the matter as to which he acts, and acts in reasonable belief that the action taken by him is warranted by the facts known to him after such reasonable effort to obtain facts.

(b) This section shall not be construed to confer immunity from liability on any medical society or hospital. In any case in which, but for the enactment of the preceding provisions of this section, a cause of action would arise against a hospital or medical society, such cause of action shall exist as if the preceding provisions of this section had not been enacted.

Section 3. A new section of KRS Chapter_____ is created to read as follows:

There shall be no monetary liability on the part of, and no cause of action for damages shall arise against, any person on account of the communication of information in the possession of such person to any hospital, hospital medical staff, medical society, medical school, or medical licensing board, when such communication is intended to aid in the evaluation of the qualifications, fitness, or character of a licensed physician and does not represent as true any matter not reasonably believed to be true.

B. Elimination of Ad Damnum Clause

Section 1. A new section of KRS Chapter_____ is created to read as follows:

Subject to the provisions of section _____, a patient or his representative having a claim under this chapter for bodily injury or death on account of malpractice may file a complaint in any court of law having requisite jurisdiction and demand right of trial by jury. No dollar amount or figure shall be included in the demand in any malpractice complaint, but the prayer shall be for such damages as are reasonable in the premises.

C. Notice of Intent to Sue

Section 1. A new section of KRS Chapter_____ is created to read as follows:

No action against a licensed physician in tort or for breach of contract based on medical services rendered, or which should have been rendered, may be commenced unless the licensed physician has been given 60 days' prior notice of the intention to commence the action in accordance with the provisions of section _____.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

No particular form of notice is required but it shall be in writing and shall notify the defendant of the nature of the claim.

D. Collateral Source Provision

Section 1. A new section of KRS Chapter_____ is created to read as follows:

Damages in an action for personal injury against a licensed physician acting as a physician shall be offset by the amount of any benefit payable by reason of such injury resulting from an event that collaterally gives rise to a benefit under the U.S. Social Security Act or any state or federal income disability or workmen's compensation act, any accident, health, sickness, or disability insurance; and any contract or agreement of any group, organization, partnership, or corporation to provide or to pay for or reimburse the cost of medical, hospital, dental, or other health care services.

Section 2. A new section of KRS Chapter _____ is created to read as follows:

Unless otherwise expressly provided by statute, a collateral source of indemnity described in section 1 shall not be subrogated to the rights of the claimant against a licensed physician.

Section 3. A new section of KRS Chapter _____ is created to read as follows:

This act shall be interpreted so as not to conflict with federal law.

Section 4. A new section of KRS Chapter _____ is created to read as follows:

The amount that is offset from the judgment shall be reduced by (a) any amount that the plaintiff has paid or contributed during the calendar year in which his right to benefits arose for any program, plan, or policy under which benefits are payable, and (b) if a program, plan, or policy was provided to the plaintiff by his employer as an employee benefit, an amount equal to any reasonable cost that would have been incurred by the plaintiff during the calendar year in which his right to benefits arose if he had personally paid for the program, plan, or policy.

E. Advance Payment Provision

Section 1. A new section of KRS Chapter_____ is created to read as follows:

In any action for damages for personal injury against any licensed physician, no payment made or offered by or on behalf of the physician to the injured person or to the claimant to meet reasonable expenses of medical care or other essential goods or services or reasonable living expenses shall constitute or be evidence of an admission of liability on the part of the licensed physician and no evidence concerning such payment or offer shall be admitted in such action except for the purpose of mitigation of damages, and the amount of damages awarded in such action, if any, shall be reduced by the amount of any such payment actually received by such injured person or claimant.

F. Statute of Frauds

Section 1. A new section of KRS Chapter_____ is created to read as follows:

No liability shall be imposed upon any licensed physician on the basis of an alleged breach of any guarantee, warranty, contract or assurance of results to be obtained from any procedure undertaken in the course of medical care, unless such guarantee, warranty, contract or assurance is expressly set forth in writing and signed by such licensed physician or by an authorized agent of such physician acting within the scope of his authority.

G. Statute of Limitations

Section 1. A new section of KRS Chapter_____ is created to read as follows:

The following actions shall be commenced within one (1) year after the cause of action occurred: An action against a physician for negligence or malpractice, provided, however, that in no event shall any action be brought more than five (5) years after the date on which the negligent act or omission occurred except where there is fraudulent concealment on the part of the defendant in which case the action shall be commenced within one (1) year after discovery that the cause of action exists. This section applies to minors commencing at the full age of 6 years and applies to all persons regardless of other legal disabilities.

H. Expert Witnesses

Section 1. A new section of KRS Chapter_____ is created to read as follows:

No person in a health care profession requiring licensure under the laws of this state shall be competent to testify in any court of law to establish the facts required to be established to prove the medical professional liability of a physician unless he is licensed to practice in this state or in a contiguous bordering state and practices a profession or specialty which would make his expert testimony relevant to the issues in the case and has so practiced this profession or specialty in one of these states during the year preceding the date that the alleged injury or wrongful act occurred.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

No liability for personal injury or death against a licensed physician, whether based on tort or contract law or otherwise, shall be imposed against such licensed physician unless expert medical testimony is presented as to the alleged deviation from the accepted standard of care in the specific circumstances of the case and as to the causation of the alleged personal injury or death.

I. Informed Consent

Section 1. A new section of KRS Chapter_____ is created to read as follows:

No recovery shall be allowed in any court in this state against a licensed physician in an action brought for treating, examining, or operating on a patient without his informed consent where:

(a) The action of the physician in obtaining the consent of the patient or another person authorized to give consent for the patient was in accordance with an accepted standard of medical practice among members of the medical profession with similar training and experience in the same or similar medical community; and

(b) A reasonable individual from the information provided by the physician, under the circumstances, would have a general understanding of the procedure and medically acceptable alternative procedures or treatments and substantial risks and hazards inherent in the proposed treatment or procedures which are recognized among other physicians in the same or similar community who perform similar treatments or procedures; or

(c) The patient would reasonably, under all the surrounding circumstances, have undergone such treatment or procedure had he been advised by the physician, in accordance with the provisions of paragraphs (a) and (b) of this section.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

(a) A consent which is evidenced in writing and meets the requirements of section (1) shall, if validly

signed by the patient or another authorized person, be conclusively presumed to be valid consent. This presumption may be rebutted if there was a fraudulent misrepresentation of a material fact in obtaining the signature.

(b) A valid signature is one which is given by a person who under all the surrounding circumstances is mentally and physically competent to give consent.

J. Periodic Payment Provision

Section 1. A new section of KRS Chapter_____ is created to read as follows:

It is the intent of the legislature in adopting this section to authorize the entry of judgments that provide for the payment of future damages through periodic payments rather than lump sum payments. By authorizing periodic payment judgments, it is the further intent of the legislature that the courts will utilize such judgments to provide compensation sufficient to meet the needs of an injured plaintiff and those persons who are dependent on the plaintiff for whatever period is necessary while eliminating the potential windfall from a lump sum recovery that was intended to provide over an extended period for the case of an injured plaintiff who then dies shortly after the judgment is paid, whereupon the balance of the judgment award is left to persons and purposes for which it was not intended. It is also the intent of the legislature that all elements of the periodic payment program be specified with certainty in the judgment ordering such payments and that the judgment not be subject at some future time to modification that might alter the specifications of the original judgment.

Section 2. A new section of KRS Chapter _____ is created to read as follows:

(a) In an action in which money damages are claimed for the future medical treatment, care, or custody of the plaintiff, a finding is required to be made by the jury, or by the court in the event trial is without a jury, on the amount of damages to which the plaintiff is entitled to compensate him for such future needs. The judgment shall state that portion thereof that is to compensate the plaintiff for his future medical treatment, care, or, custody. Any money obtained in satisfaction of that portion of the judgment shall be governed by the provisions of subdivision (b) or (c).

(b) Any money recovered from or paid by the judgment debtor in satisfaction of that portion of the judgment described in subdivision (a) shall be deposited in court, to be disbursed under the supervision of the court for the plaintiff's future medical treatment, care, or custody. In the event of the plaintiff's death or in the event the plaintiff's needs for such future care are terminated, as determined by the court, any money not disbursed for the benefit of the plaintiff pursuant to this subdivision shall be paid to the judgment debtor.

(c) In lieu of the provisions of subdivision (b), the defendant may file with the court an undertaking or bond in the amount specified in subdivision (a), guaranteeing the prompt payment of moneys for the future medical treatment, care, or custody of the plaintiff as the court may direct. Such undertaking or bond may be withdrawn in the event of the plaintiff's death or in the event the plaintiff's needs for such future care are terminated, as determined by the court.

K. Res Ipsa Loquitor

Section 1. A new section of KRS Chapter_____ is created to read as follows:

In professional liability actions against licensed physicians, there shall be no presumption or inference of negligence on the part of any defendant.

Section 2. A new section of KRS Chapter _____ is created to read as follows:

In professional liability actions against licensed physicians, the jury shall be instructed that the plaintiff has the burden of proving, by a preponderance of the evidence, the negligence of the defendant or defendants. The jury shall be further instructed that injury alone does not raise either a presumption or an inference of negligence.

III. *Legislation Affecting Liability Insurance Coverage.*

A. Basic Insurance and Excess Pool

Section 1. A new section of KRS Chapter_____ is created to read as follows:

Financial responsibility of a physician under this chapter may be established only by filing with the Commissioner of Insurance proof that the licensed physician is insured by policy of malpractice liability insurance in the amount of at least $100,000 per occurrence.

Section 2. A new section of KRS Chapter_____ is created to read as follows:

There is hereby created, out of the general revenues of the Commonwealth of Kentucky, and an annual "physician's surcharge" as provided in section (5), a Patient's Compensation Fund, for exclusive use for the purposes stated in this section. The fund and any income from it shall be held in trust, deposited in a separate account, invested and reinvested by the Commissioner, and shall not become a part of the general fund of the state.

Section 3. A new section of KRS Chapter_____ is created to read as follows:

All claims from the Patient's Compensation Fund shall be computed on December 31 of the year in which the claim became final. All claims shall be paid on or before January 15. If the fund would be exhausted by payment in full of all claims allowed during a calendar year, then the amount paid to each claimant shall be prorated. Any amounts due or unpaid shall be in the following calendar year.

Section 4. A new section of KRS Chapter_____ is created to read as follows:

The Auditor of Kentucky shall issue a warrant in the amount of each claim submitted to him against the fund on December 31 of each year. The only claim against the fund shall be a voucher or other appropriate request by the Commissioner after he receives: (a) a certified copy of a final judgment in excess of $100,000 against a qualified licensed physician; or (b) a certified copy of a court approved settlement in excess of $100,000 against a qualified

physician. The amount paid from the fund may not exceed $400,000 for any single claim under any circumstances.

Section 5. A new section of KRS Chapter_____ is created to read as follows:

An annual surcharge shall be levied on all physicians licensed in Kentucky. The surcharge shall be as determined by the Commissioner based upon actuarial principles and shall not exceed ten percent (10%) of the cost to each physician for maintenance of financial responsibility. The surcharge shall be collected on the same basis as premiums by each insurer, the risk manager and surplus lines agents from the physician in Kentucky. Before _____, the Commissioner shall send to each insurer a statement explaining the provisions of this section together with any other information necessary for their compliance with this section. If the annual premium surcharge is not paid within the time limited herein the certificate of authority of the insurer, risk manager, and surplus lines agents shall be suspended until the annual premium surcharge is paid.

Section 6. A new section of KRS Chapter_____ is created to read as follows:

No physician shall be permitted to practice medicine in this state unless he currently carries medical liability insurance in the coverage amount of $100,000 per claim, or posts with the custodian of insurance an approved equivalent bond or assets of a kind otherwise permitted to insurance companies. Any insurance company which is authorized to write any class of liability insurance in this state shall be required to become a member of a medical liability insurance pool established pursuant to regulations issued by the Commissioner of Insurance. If any physician in this state whose license has not been revoked or suspended is unable to obtain medical liability insurance through normal market channels, or to post bond or assets as provided above, he may apply to the Insurance Commissioner who will assign his coverage to one of the companies in the pool in accordance with an equitable procedure to be established by the Commissioner of Insurance. Premium rates and policy provisions concerning deductibles or co-insurance shall be subject to approval by the Commissioner of Insurance. The company to which the coverage is assigned shall receive the premiums and bear the risk, but administration of the coverage shall be delegated to that insurance company doing business in this state which writes the largest volume of medical liability coverage on a non-assigned basis for which such company will be paid a percentage of the premium equivalent to the percentage required for administrative expenses under its own medical liability insurance.

IV. *Kentucky Medical Association Sponsored Insurance.*

Under the Insurance Code of Kentucky, the Kentucky Medical Association could establish an incorporated stock, mutual, or Lloyd's plan insurance company and receive a certificate of authority for conducting a professional medical liability insurance business in Kentucky. Any such insurance company would be required to meet the capital surplus and reserve fund requirements appropriate to the risk, and would further require reinsurance protection on liability in accordance with the statutes. Accordingly, in the opinion of counsel, no additional legislation is needed in the event the Kentucky Medical Association should determine to establish its own professional medical liability insurance company.

Resolution D

Allen County Medical Association

WHEREAS, it is one of the functions of and indeed the duty of the Kentucky Medical Association to encourage and aid in the delivery of the best medical care available to all of the citizens of Kentucky, and

WHEREAS, it is essential for the practicing physician to have adequate malpractice insurance coverage at a reasonable cost in order for him to continue in the private practice of medicine, and

WHEREAS, in the past few years medical malpractice insurance has increased greatly in cost so that now many physicians must pay exorbitant premiums for coverage, and others have difficulty obtaining coverage at any cost, and

WHEREAS, the inability to obtain and the high cost of obtaining malpractice insurance has caused many physicians to retire early or leave the private practice of medicine, and this in turn has affected the medical and hospital services in the state of Kentucky, to the detriment of patients, the public and the health care providers; be it therefore

RESOLVED, that the Kentucky Medical Association use its Task Force on Liability Insurance, any other committee necessary and all of its energies, influence and whatever financial means are necessary to see that one or both of the following measures are implemented before the 1976 annual Kentucky Medical Association meeting:

I. The Kentucky State Legislature at its 1976 spring session adopt malpractice legislation which would be similar to Workmen's Compensation Programs or adopt legislation which, while not limited to, would at least:
   a. Establish a Medical Malpractice Review Board whose membership shall consist of one-third physicians licensed to practice in Kentucky, one-third attorneys licensed to practice in Kentucky and one-third laymen, who would review all malpractice claims before any malpractice action could be filed in any court in Kentucky.
   b. Establish a maximum three-year, from date the negligent act occurred, statute of limitations period for filing malpractice claims.
   c. Set a maximum $100,000 liability limit for malpractice claims.
   d. Establish a sliding fee scale for legal contingency fees.
   e. Cause medical care providers to be permitted to file counterclaim suits in malpractice claim cases.

f. Make it easier to ban from the practice of medicine those unethical or incompetent physicians as well as those repeatedly found guilty of malpractice.

II. The Kentucky State Legislature at its 1976 spring session adopt legislation which would allow physicians to set up their own insurance company to provide malpractice coverage, and immediately upon enactment of this legislation, that the Kentucky Medical Association proceed to establish their own insurance company and offer malpractice coverage to the physicians of Kentucky; and be it further

RESOLVED, that since malpractice insurance coverage is of vital importance to all practicing physicians, that this resolution be presented to, discussed, amended if necessary and acted upon in truly democratic fashion by the House of Delegates of the Kentucky Medical Association in regular session, and not be decimated or substituted for by any other individual, group of individuals or committee.

Resolution I

W. Neville Caudill, M.D.

WHEREAS, the Court of Appeals of Kentucky has set legal precedent in this state allowing discovery of confidential records from peer review bodies, and

WHEREAS, such precedent is detrimental to the public welfare by virtue of the fact that it inhibits full and free discussion of problems brought to a peer review group, and

WHEREAS, the Kentucky revised statutes now provide immunity from civil litigation for physicians, podiatrists or dentists who serve on a peer review body but do not provide such immunity for nurses, medical records personnel nor other health professionals, and

WHEREAS, the Kentucky Hospital Association has, on the advice of counsel, proposed an amendment to KRS 311.377 which would remedy these situations (see attachment); be it therefore

RESOLVED, that the KMA join with the KHA in sponsoring and actively working for the passage of these needed legislative changes.

Draft

KENTUCKY HOSPITAL ASSOCIATION

311.377 Physicians and others serving as members of or participating in medical review boards; immunity.

(1) No person who is a member, participant in or employee of, or who furnishes professional counsel or services to any committee, board, commission, professional standards review organization or other entity which is duly constituted by any licensed hospital, medical society or association affiliated with the American Medical Association, American Podiatry Association, American Dental Association or the American Hospital Association, or a medical care foundation affiliated with such a medical society or association, or governmental or quasi-governmental agency for the purpose of reviewing and evaluating the medical acts of others, health care personnel or any appointed member of the State Health Planning Council or any member of a recognized Regional Health Planning Council shall be required to respond in damages for any action taken by him in good faith as a member, participant, employee or provider of professional counsel or services to such committee, board, commission, professional standards review organization or other entity.

(2) The proceedings and records of any committee, board commission, professional standards review organization or other entity, as referred to in the preceding section, shall not be subject to discovery, subpoena or introduction into evidence, in any civil action in any court or in any administrative proceeding before any board, body or committee whether federal, state, county or city. No person who was in attendance at a meeting of any such committee, board, commission, professional standards review organization or other entity, shall be permitted or required to testify in any such civil action or administrative proceedings as to any testimony, evidence or other matters produced or presented during the proceedings or reflected in the records of any such committee, board, commission, professional standards review organization or other entity, or as to any findings, recommendations, evaluations, opinions or other actions of any such committee, board, commission, professional standards review organization or other entity or of the members thereof. Provided, however, that information, documents or records otherwise available from other sources are not immune from discovery or use in any such civil action or administrative proceeding merely because of their presentation in proceedings referred to herein; *provided further, however, that, in any court proceeding challenging the denial of staff privileges by any health service entity, representatives of the health service entity may with the consent of the health service entity testify concerning the evidence received and the proceedings involved in the entity's denial of such staff privileges.* No person who testifies in the proceedings referred to herein or who is a member of any committee, board, commission, professional standards review organization or other entity referred to herein shall be prohibited from testifying as to any information within his knowledge, but such person shall not be required or permitted to testify concerning his testimony or the testimony of others in any proceeding referred to herein or concerning any opinions formed by him as a result of any of the proceedings referred to herein. Provided, further, that nothing herein shall be construed so as to prohibit the introduction of testimony, records, findings, recommendations, evaluations, opinions or other actions of any such committee, board, commission, professional standards review organization or other entity in any statutory proceeding related to the functions of any committee, board, commission, professional standards review organization or other entity referred to herein.

Resolution O

Campbell-Kenton County Medical Society

WHEREAS, the current crisis concerning professional liability has progressed to the point where it has begun to affect the availability of medical care in Kentucky, and

WHEREAS, the Kentucky Medical Association wishes to take positive action to assure continuing medical care to the citizens of the Commonwealth, and

WHEREAS, that crisis can be alleviated only by effective legislation, therefore be it

RESOLVED, that the Kentucky Medical Association finds that legislation is necessary to create a new section of the Kentucky Revised Statutes which would require the reporting upon conclusion of the claim, the name of every health care provider against whom a suit is filed, settlement made or a judgment rendered on a professional liability claim, to the State Insurance Commission by the plaintiff's attorney and by the health care provider or his insurer, stating: Nature of Claim; Damages Asserted and Alleged Injury; Attorney's Fees and expenses incurred in connection with the claim or defense; the amount of any settlement or judgment, and the findings of the screening panel; be it further

RESOLVED, that the intent of this resolution may be accomplished by appropriate amendment of Legislative Proposal on Professional Liability Section I, Part B, Section 1; and be it further

RESOLVED, that the Kentucky Medical Association House of Delegates direct the Board of Trustees to seek enactment of this legislative proposal at the next session of the Kentucky General Assembly.

Resolution P

Campbell-Kenton County Medical Society

WHEREAS, the current crisis concerning professional liability has progressed to the point where it has begun to affect the availability of medical care in Kentucky, and

WHEREAS, the Kentucky Medical Association wishes to take positive action to assure continuing medical care to the citizens of the Commonwealth, and

WHEREAS, that crisis can be alleviated only by effective legislation; therefore be it

RESOLVED, that the Kentucky Medical Association find that legislation is necessary to create a new section of the Kentucky Revised Statutes which would require the Commissioner of Insurance to make available the name of every provider against whom a settlement is made or a judgment rendered, to the Kentucky Medical Association. In cases judged frivolous by the screening panel, and where suit has nevertheless been filed, the Commissioner of Insurance shall make available to the Kentucky Bar Association the name of the attorney for review; and be it further

RESOLVED, that the intent of this resolution may be accomplished by appropriate amendment of Legislative Proposal on Professional Liability Section I, Part B, Section 2, and be it further

RESOLVED, that the Kentucky Medical Association House of Delegates direct the Board of Trustees to seek enactment of this legislative proposal at the next session of the Kentucky General Assembly.

Resolution Q

Campbell-Kenton County Medical Society

WHEREAS, the current crisis concerning professional liability has progressed to the point where it has begun to affect the availability of medical care in Kentucky, and

WHEREAS, the Kentucky Medical Association wishes to take positive action to assure continuing medical care to the citizens of the Commonwealth, and

WHEREAS, that crisis can be alleviated only by effective legislation; therefore be it

RESOLVED, that the Kentucky Medical Association finds that legislation is necessary to create a new section of the Kentucky Revised Statutes which would provide that Punitive Damages against a health care provider may be awarded only in case of premeditation or overt malice, and be it further

RESOLVED, that the intent of this resolution may be accomplished by appropriate amendment of Legislative Proposal on Professional Liability Section I, Part C, Section 1; and be it further

RESOLVED, that the Kentucky Medical Association House of Delegates direct the Board of Trustees to seek enactment of this legislative proposal at the next session of the Kentucky General Assembly.

Resolution R

Campbell-Kenton County Medical Society

WHEREAS, the current crisis concerning professional liability has progressed to the point where it has begun to affect the availability of medical care in Kentucky, and

WHEREAS, the Kentucky Medical Association wishes to take positive action to assure continuing medical care to the citizens of the Commonwealth, and

WHEREAS, that crisis can be alleviated only by effective legislation; therefore be it

RESOLVED, that the Kentucky Medical Association finds that legislation is necessary to create a new section of the Kentucky Revised Statutes which would provide that no liability for personal injury or death shall be imposed against any provider of medical care based on alleged negligence in the performance of such care unless expert medical testimony is presented. Such testimony must establish the alleged deviation from the accepted standard of care in the specific circumstances of the case including the community in which it occurred, and establish the causation of the alleged personal injury or death. The Section would further limit medical experts com-

petent to testify to those licensed to practice and who had practiced their profession and pertinent specialty during the year preceding the date on which the alleged injury occurred; and be it further

RESOLVED, that the intent of this resolution may be accomplished by appropriate amendment of Legislative Proposal on Professional Liability Section II, Part H, Section 1; and be it further

RESOLVED, that the Kentucky Medical Association House of Delegates direct the Board of Trustees to seek enactment of this legislative proposal at the next session of the Kentucky General Assembly.

Resolution S

Campbell-Kenton County Medical Society

WHEREAS, the current crisis concerning professional liability has progressed to the point where it has begun to affect the availability of medical care in Kentucky, and

WHEREAS, the Kentucky Medical Association wishes to take positive action to assure continuing medical care to the citizens of the Commonwealth, and

WHEREAS, that crisis can be alleviated only by effective legislation; therefore be it

RESOLVED, that the Kentucky Medical Association finds that legislation is necessary to create a new section of the Kentucky Revised Statutes which would provide that a physician's medical liability coverage cannot be cancelled without cause, or a premium cannot be raised disproportionately by an Insurance Company without the approval of the Commissioner of Insurance after consultation with the Kentucky Medical Association and Medical Licensure Board. This approval must be based upon their review of the facts; and be it further

RESOLVED, that the intent of this resolution may be accomplished by appropriate amendment of Legislative Proposal on Professional Liability Section III, Part A, Section 6; and be it further

RESOLVED, that the Kentucky Medical Association House of Delegates direct the Board of Trustees to seek enactment of this legislative proposal at the next session of the Kentucky General Assembly.

Recommendations, Reference Committee No. 3

Mr. Speaker, the committee reviewed and discussed at length the Report of the President pertaining to liability insurance, **only**; the Report of the Chairman, Board of Trustees, pertaining to the Ad Hoc Committee on Professional Liability Insurance, as well as the legislative proposal on liability insurance, **only**; and Resolutions D, I, O, P, Q, and S. Many excellent recommendations were brought forth by these resolutions and reports; however, due to the duplication and overlapping of the various resolutions and reports, Reference Committee No. 3 elected to offer a substitute resolution which would encompass the best principles of all of the recommendations, as follows:

BE IT RESOLVED, that these principles of legislative reform be used by the Board of Trustees in its work before and during the upcoming meeting of the Kentucky Legislature, to accomplish, as much as possible, legislation supporting these principles:

1) Reporting and Review of Claims
2) Limitation on Judgment
3) Limitation and Review of Contingency Fees
4) Non-Discovery Statute and Immunity of Medical Review Board Personnel and Records
5) Elimination of Ad Damnum Clause
6) Collateral Source Provision
7) Advance Payment Provision
8) Statute of Frauds
9) An Amendment to our existing Statute of Limitations making it applicable to minors at age six.
10) Expert Witness
11) Informed Consent
12) Periodic Payment Provision
13) Res Ipsa Loquitur
14) Basic Insurance and Excess Pool with the recommendation that the Excess Pool be funded out of general tax revenue.

(*Editorial Note*: *The House of Delegates is not in favor of the requirement of liability insurance and participation of the fund being mandatory.*)

15) Punitive Damages may not be demanded in any medical malpractice complaint.
16) Comparative Negligence in prorating awards in cases with multiple defendants; and be it further

RESOLVED, that the Kentucky Medical Association use its Task Force on Liability Insurance, any other committee necessary, and all of its energies, influence and whatever financial means are necessary to implement these principles.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded from the floor.

The Speaker recognized Paul Parks, M.D., Chairman of the Board of Trustees, who reported the Board of Trustees suggested adding an additional item; that being No. 17—Joint Underwriting Association.

Suggestions were also made from the floor that Item 18—Review of Professional Activity (Resolution P), and Item 19—Cancellation of Insurance (Resolution S) also be added, and that Item 13 be changed from "Res Ipsa Loquitur" to "Elimination of Res Ipsa Loquitur."

A substitute motion was made, seconded and passed that Items 17, 18, and 19, as well as the change in Item 13 as noted above, be included with the recommendations of the Reference Committee.

In addition, a motion made by Lee Hess, M.D., was duly seconded as follows: "In the event that any of the above 19 principles are not included in the recommendations of the Governor's Council on Medical Liability Insurance, the Board of Trustees shall direct

the Legislative Committee to consider having legislation written that will include these principles for their presentation at a General Assembly in Frankfort."

The motion carried.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 3 as a whole, as amended.

The motion was seconded and carried.

Mr. Speaker, I wish to thank the members of this committee, Doctors McHenry S. Brewer, Kenneth M. Eblen, Harvey A. Page and John M. Stoeckinger, and Miss Sharon Heckel for preparing this report.

REFERENCE COMMITTEE NO. 3

Earl P. Oliver, M.D., Scottsville, Chairman
McHenry S. Brewer, M.D., Louisville
Kenneth M. Eblen, M.D., Henderson
Harvey A. Page, M.D., Pikeville
John M. Stoeckinger, M.D., Lexington

At this time, Doctor Cooper took the podium as Chairman of the KEMPAC Board of Directors to present his annual report which follows:

Fellow delegates and guests—

It is a pleasure to report to you that every member of your KMA Board of Trustees is now a member of KEMPAC and a record of 65 sustaining members has been reached.

Sixteen physician candidate support committees, working with KEMPAC were formed in the May Primary. Six state senatorial candidates and ten state representative candidates were supported with 12 victorious candidates, or 75%. Eight Senate seats and 45 seats in the House of Representatives were determined in the Primary.

As you know, it is the policy of KEMPAC to not participate in the Gubernatorial races, placing our activities at the level of State Senators and State Representatives, as well as U. S. Senators and U. S. Representatives.

As the governing body of KMA, we know that you are aware of the fact that only dues dollars are spent for the support of candidates. Although the sustaining membership is at an all-time high level, the active family memberships have not, however, reached last year's figure.

With a total of 1,176 KEMPAC members, about half of these being physicians' wives, you can readily see this is just about one quarter of Kentucky physicians. What with the many bills pertaining to health care to be considered next year in the Kentucky General Assembly, we must get political representatives in office who will seek our advice and recommendations in legislation that affects our profession and patients.

If you are not a member of KEMPAC, we respectfully ask that you join. A KEMPAC booth is set up in the lobby of Bluegrass Convention Center. We invite you to stop by and talk with a KEMPAC Director. Your comments and suggestions are welcome.

I would like to express my appreciation to all KEMPAC Board members who have served this past year, to you, the House of Delegates of KMA and to the KMA Board of Trustees for your 100% membership and your encouragement. Also, a special thanks on behalf of the KEMPAC Board to the Woman's Auxiliary to KMA and to our staff.

In 1974, as in past years, the KMA House of Delegates reaffirmed its belief in the objectives of KEMPAC and AMPAC and recommended 100% participation by doctors and their spouses. It further recommended a vote of endorsement and encouragement of the KEMPAC organization to continue its worthwhile political efforts on the behalf of our free enterprise system and the freedom of the art and science of medicine.

I recommend that you reaffirm this endorsement and include the billing of KEMPAC dues in the statewide billing for 1976 KMA dues.

(Following Doctor Cooper's presentation, a motion was made, seconded, and carried to accept the KEMPAC report.)

REFERENCE COMMITTEE NO. 4

Walter R. Brewer, M.D., Lexington, Chairman

Reference Committee No. 4 considered the following reports and resolutions:

13. The Report of the Board of Directors, Kentucky Physicians Mutual, Inc.

20. The Report of the Advisory Committee to Blue Cross-Blue Shield, with the following *exception:* Beginning with the last two lines on Page 20.7, pertaining to that section entitled "Physician Cost Awareness Plan" to the last paragraph on Page 20.8—referred to Reference Committee No. 2

23. The Report of the Committee on Health Care of the Poor

27. The Report of the Claims and Utilization Review Committee

34. The Report of the Committee on Community and Rural Health

37. The Report of the Committee on School Health, Physical Education and Medical Aspects of Sports

39. The Report of the Health Manpower and Placement Services Committee

45. The Report of the KMA Advisory Committee to KPRO

5. The Report of the Chairman, Board of Trustees; Pages 5.16-5.18, pertaining to Ad Hoc Committee on Peer Review Expenses, **only**

Resolution C—Kentucky PSRO (Allen County Medical Association)

Resolution H—Blue Cross-Blue Shield (Shelby-Henry-Oldham Medical Society)

Resolution X—KMA Policy Concerning KPRO (Robert E. Smith, M.D.)

Report of the Board of Directors, Kentucky Physicians Mutual, Inc.

In my first year as Chairman of the Board of Kentucky Physicians Mutual, Inc., (Blue Shield) it is indeed a pleasure to report on a year of growth and positive accomplishments in spite of uncertain economic conditions and other pressures and problems confronting the entire health care industry.

During 1974, 1,491 new groups voluntarily enrolled their employees and eligible dependents in Blue Shield of Kentucky making a total of 13,534 member employer groups. This produced a new membership growth of 3.3 percent over the previous year which we consider respectable in view of the current economic situation. Over 1,338,387 Kentuckians are now covered by Kentucky Blue Shield.

$34,244,736 was paid by Kentucky Blue Shield for professional services rendered in 1974. Since the organization of Blue Shield in 1949, $243,212,329 has been paid for professional services rendered to our members. 850,950 of our members carry additional benefits through Major Medical and Extended Benefits to help pay for outpatient and catastrophic illnesses and some 81,625 people are protected by the Blue Cross and Blue Shield Supplement to Medicare.

The Prescription Drug Program now has 38,079 members and during last year $612,578 was paid in prescription benefits.

The health care industry has been confronted with the problem of malpractice insurance and an inflationary economy which has had its proportionate effect on charges. We have seen hospital charges and physician's fees increase substantially since the lifting of controls last May.

In addition to increasing hospital and professional charges, we are also seeing an increase in utilization with the number of services and admissions increasing over previous years. Some of this increase is due to more defensive medicine being practiced because of the increasing awareness of malpractice suits.

The increasing charges and increasing utilization have a direct effect on Blue Cross and Blue Shield payments and the dues we charge our members. We had Blue Cross and Blue Shield dues increases in the Fall of 1974 and because of the rising costs and utilization, additional increases are necessary during 1975. Rates are based on the cost of care and the utilization of services by members plus administrative cost.

Our Blue Shield Plan is sound financially and on January 1, 1975, our reserves amounted to $9.57 per member.

Last year we reported that many of our low benefit programs would be eliminated from the marketplace. We are pleased to announce that this has now been accomplished. Effective with the January, 1975, billing and subsequent billings for our Direct and Farm Bureau Subscribers, we have eliminated Standard Blue Cross and Standard Blue Shield. These members are being billed for a new benefit package of $15 Comprehensive Blue Cross and Schedules C and D, Blue Shield. At the time of the initial billing, we gave our subscribers an opportunity to increase their contracts to higher benefits. Beginning January of 1975, all Class I Groups (with fewer than 50 contracts) were upgraded to these minimum levels of benefits. Class II and III Groups (with more than 50 contracts) will be upgraded on the anniversary date of their group contracts.

As this report is being prepared, it would appear that Congress is moving closer toward approval of legislation to extend health care protection to the unemployed which in effect, is a beginning form of National Health Insurance. Based on the best information we have available, it would appear that NHI legislation may be enacted early in 1976 for implementation July 1, 1977. Our current thinking is that the National Health Insurance Program will cover all U.S. residents under one of three programs.

(a) Mandated Insurance Program (MIP) for all employed and self-employed persons under 65 years of age. Employer groups would be expected to bear a substantial portion of the premium costs with the balance paid by the employees.

(b) Government Assisted Program (GAP) for low income and other persons who are not eligible for coverage under Medicare or MIP.

(c) The Medicare Program.

National economic conditions may compel a program phasing-in; however, all programs are expected to have the same national minimum standards of benefits. It is very likely that carrier regulations will eliminate a large number of small and/or poor performing insurance companies. We feel that the voluntary system will continue to play a vital part in health care and whatever health care legislation is enacted will provide many new challenges and opportunities.

We now have over 339,616 Kentuckians covered by Usual, Customary and Reasonable Programs. Physician participation continues to increase with 2,644 Kentucky physicians participating. In 1974, 289,644 Usual, Customary and Reasonable services were processed, representing payment for professional services in excess of $14,257,909. Of these claims, 4,181 required special handling by our Professional Relations staff and 3,660 of them were processed either by additional information or voluntary reconsideration of the submitted fee. 521 cases required review by peer review committees which represents less than two-tenths of one percent of the cases. Physician cooperation in this program, overall, continues to be excellent.

At the direction of the Blue Shield Board, staff has continued with the development of individual physician fee profiles for use in the administration of the Usual, Customary and Reasonable Program. The computer programming has been completed and individual fee profiles have been produced for each physician submitting Blue Shield claims on or after January 1, 1975. The use of profiles will provide improved administration in the Usual, Customary and Reasonable Program. Prior to implementing profiles, a discussion will be held with the individual physicians and an agreement reached on profiled charges. This

will enable the physician to know in advance what Blue Shield's Usual, Customary and Reasonable payments for his services will be. The use of profiles in general will better enable staff to define charge patterns and more accurately rate employee groups who are enrolled in Blue Shield's Usual, Customary and Reasonable benefits.

On January 1, 1975, a new coding and nomenclature system developed by the National Association of Blue Shield plans was implemented. This is a comprehensive four digit system and is a positive accomplishment in better defining services rendered by physicians and thus improving the accuracy of our statistical information as well as the claims we process.

The Utilization Review Program of Blue Cross and Blue Shield has been developed to establish norms and patterns of health care in Kentucky. Using data gathered from in-patient hospital cases, the program provides statistical information from which utilization reports are generated. Using these reports, an educational approach is being taken with providers of care. Each hospital in the state has now been presented a Utilization Review Report outlining data gathered from 1974 in-patient Blue Cross cases. Quarterly follow-up reports have also been generated and sent to each hospital. These reports can be very valuable to the medical staff and utilization review committees in monitoring and evaluating medical care and individual physician patterns of practice.

Provider response has been excellent and several hospital utilization review committees have requested additional reports and special studies.

Another facet of this Utilization Review Program centers around the development of utilization review profiles produced for each practicing physician in the state. The educational approach is again used and Professional Relations representatives are delivering profiles to all physicians. This enables practicing physicians to compare their practice patterns with other physicians in their own specialty. Reports from the profession have been very positive and some physicians are requesting additional profiles so that they may monitor their own practice patterns for changes and trends.

Blue Shield of Kentucky has continued to work closely with the Kentucky Medical Association and the Kentucky Peer Review Organization in the PSRO development. It is in the best interest of our members and desired by KMA. We see a viable role in working with the development in such areas as providing computer support, statistical information for developing standards for medical care, parameters for case review and communications and education with the review committees and provider segment. Our primary interest centers around a review system that could eventually be extended to our regular underwritten business.

With the change in PSRO legislation and new Medicare utilization review regulations which provide for admission reviews, concurrent review and medical care evaluation, there is an increased need for data gathering and reporting programs such as the Kentucky Utilization Program (KUP). There are now 61 hospitals participating in KUP and we expect this number to increase significantly in the future.

Blue Shield has previously reported to the KMA House of Delegates our position to experiment with alternative methods of health care delivery. With the passage of a Federal Health Maintenance Organization Act and the passage of a State Health Maintenance Organization Act, several federally funded HMOs have begun operation. The 1974 KMA House of Delegates approved the Board of Trustees' resolution endorsing our involvement in a system based on the individual practice association approach.

Blue Shield, jointly with Blue Cross of Kentucky, has now developed a prototype of an experimental alternate delivery system utilizing the individual practice association approach which represents open panel practice.

The individual practice association approach eliminates the need for and the cost of financing new bricks and mortar which may be duplicative of existing facilities. This approach utilizes contractual relationships with physicians in the setting in which they currently practice medicine. In order to be competitive in the marketplace and to be able to offer a true dual choice to subscribing members, the new program will be developed in a manner that it may eventually be certified by HEW under the Federal Health Maintenance Organization Act of 1973. It will also meet the criteria of the HMO Act passed by the 1974 session of the Kentucky Legis'ature. We hope for the program to be operational late in 1975.

The voluntary prepayment system is strong, vital and continues to grow. There are many dedicated people in and out of medicine who voluntarily give of their time to make it work and we are extremely grateful to them.

Our staff has continued to meet with the KMA Advisory Committee to Blue Cross and Blue Shield in an effort to give all physicians the opportunity to have a voice in our operation.

As Chairman of the Board and speaking for the Board, we know our objectives are in the best interest of the people, the medical profession and our voluntary system. We again thank the entire medical profession of Kentucky and the staff of the Kentucky Medical Association for their cooperation and contribution in the past year. We know that our future will be largely dictated by how we, working as a team, respond to the opportunities and challenges facing the voluntary system.

Delmas M. Clardy, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Board of Directors, Kentucky Physicians Mutual, Inc.; was reviewed. The Committee commends Kentucky Physicians Mutual, Inc., for the efficiency of the Usual, Customary and Reasonable Program and its efforts at implementing a professional profile program. Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Advisory Committee to Blue Cross and Blue Shield

The KMA Advisory Committee to Blue Cross and Blue Shield met at the KMA Headquarters Office on April 30, 1975.

The first order of business was to review and note that the purpose of the Committee is to "monitor the operation of Kentucky Blue Cross and Blue Shield with the objective of striving to furnish for the public the most advantageous coverage possible for the premium dues paid, avoiding abuses of Blue Cross and Blue Shield to include studying and correcting trends before they develop into abuses and continuing to keep Kentucky physicians informed, interested and with a voice in the operation of Blue Cross and Blue Shield."

In addition to Mr. Tom Stroud, Vice President; Mr. Alan Leichhardt, Director of Professional Relations, and Mr. Don Haberle, Program Director, Alternative Delivery Systems; we were pleased to have Blue Shield's Director of Medical Services, Henry B. Asman, M.D., and Frank B. Radmacher, M.D., Medical Consultant, with us.

The following will summarize staff reports that reflect continuing activity and leadership provided by Kentucky Blue Cross and Blue Shield.

Enrollment

Staff reported that 1974 was another good year for membership growth for Kentucky Blue Cross and Blue Shield. Your Committee was pleased to learn that permission had been given by the Commissioner of Insurance to eliminate Standard Blue Cross, Standard, Preferred and Schedules A and B Blue Shield from the marketplace beginning January, 1975. These contracts were upgraded to a more realistic level of coverage.

Kentucky Blue Cross and Blue Shield is continuing to market its Usual, Customary and Reasonable Certificate and many groups are enrolling in this paid-in-full type program rather than the indemnity plans. Staff reported that the Delta Dental Plan is growing with several groups enrolled and several more expressing considerable interest in it.

Provider and Professional Relations

Staff reported that a reorganization was recently completed in order to be of greater assistance and improve effectiveness, coordination and communication between providers and the Plans.

To achieve this, separate Provider and Professional Relations departments were established which entailed the employment of some new people and reassigning other personnel. The primary responsibility of Provider Relations Representatives is to provide service to hospitals, skilled nursing facilities and home health agencies, while the Professional Relations Representatives primarily serve physicians, dentists and pharmacists.

During 1974, the Provider and Professional Relations staff made over 8,400 calls on physicians' offices. In addition, the Provider and Professional Relations Division initiated and assisted in rewriting a revised Blue Shield Physician's Manual which is in the process of being printed.

Claims

During 1974, Blue Cross and Blue Shield processed a total of 1,559,000 claims. It was noted that with this volume of claims there were problems that required considerable staff time for research and solution. It was pointed out that administratively a rejected claim costs as much to process as one that is paid, and that oftentimes the problem lies in claims that are submitted for services not covered under the patients' Certificates of Membership. It was recognized that members sometimes don't fully understand the extent of their coverage resulting in the patient's demand upon the physician to file a claim even when the physician feels the service is not covered. The Blue Shield staff is aware of this problem and is continuing an education program with members and physicians to try to decrease the number of unpayable claims filed. It was interesting to note that of all the claims processed during 1974, over 75,000 were processed in accordance with the member's Coordination of Benefits provision of the Certificates of Membership. This amounted to a savings of $1,726,570.00. Savings in this amount have a favorable effect on dues and staff reported that they expect this trend to continue during 1975.

Usual, Customary and Reasonable

Blue Shield's Usual, Customary and Reasonable Program was developed in close cooperation with KMA's Advisory Committee to Blue Shield. The program was initiated in 1968 and since that time marketing efforts have been deliberately limited to assure efficient operation and acceptance by the profession.

At the present time, over 200,000 Kentuckians are covered by UCR and 2,644 physicians have signed agreements to participate in the plan.

The Committee was advised that several improvements in the program are now being implemented, one of which is the use of individual physician fee profiles. Individual profiles will allow Blue Shield to more directly recognize the physician's usual charges in the program's administration. Implementation of these profiles will enable physicians to know in advance the payment that can be expected from Kentucky Blue Shield for covered services rendered to members with UCR benefits. As this program goes into effect, a considerable effort will be made to personally contact each physician in Kentucky to discuss his fee profile. The implementation of individual physician profiles will change several areas of the program's administration, such as:

a. In order to update a physician's profile, he needs only to notify Blue Shield in writing 45 days in advance of his change in fees.

b. Under normal circumstances Blue Shield will accept profile updates no more frequently than once per year.

c. Claims exceeding payment guidelines will automatically be processed either at the profiled fee or at the current guideline and the physician will be notified that "profile" payment has been made. This

pay first and adjudicate later procedure should eliminate the vast majority of delays created when claims exceed payment guidelines.

The Committee feels that Blue Cross and Blue Shield is to be congratulated on this improvement as it feels that this change will be most beneficial to physicians and their patients and should in the end result in greater physician participation.

Report of the Director of Medical Services

Doctor Asman reported in detail the many advances made as a result of the development of the Division of Medical Services. At the present time, there are three full-time physicians in the Division and several improvements have been instituted in the procedures for the medical review and adjudication of questionable Blue Cross claims. More complete medical records are requested, when necessary, so that decisions can be made on sound medical judgment. Before a claim is rejected the attending physician is requested to provide any additional medical information he may have. A toll-free WATS line has been installed for the convenience of the physicians in dictating a response to such requests. The WATS line is in service 24 hours a day, seven days a week. The effectiveness of these measures is indicated by the fact that there has been a marked decrease in the number of cases rejected over the past 18 months.

Most UCR contracts provide benefits for outpatient laboratory services. There are other subscribers with indemnity contracts having a rider providing a limited dollar amount for laboratory services per year. Three problem areas were noted:

1. There are some physicians who, in billing for a complete blood count for example, break the procedure down into its various components and list a separate charge for each individual component. This results in Blue Shield being billed for a charge which is 30% to 40% greater than the usual charge for a CBC. The Committee felt that this practice raised serious ethical questions and went on record opposing this fractionalization of laboratory procedures which results in higher costs and requests that Blue Shield vigorously monitor this situation. The Committee further feels that KMA should discourage this practice and asked Blue Shield to have their Professional Relations Representatives make personal contact with physicians billing in this fashion, when indicated.

2. A second question arose concerning charges billed to Blue Shield for laboratory tests performed in a laboratory outside the physician's office. The Committee noted that the KMA House of Delegates and KMA and AMA Judicial Councils have established a policy that it is preferable if the laboratory itself bills for services it performs; it is permissible for the attending physician to bill the patient (or third party) for the lab services, provided the bill or claim shows the name of the laboratory and the exact charge made by the laboratory. Physicians are entitled to a small "handling" charge for collecting the specimen, postage and interpretation, however, it is unethical for a physician to make a profit on services performed by someone else.

It was reported that it has become more and more apparent that many physicians are not following these guidelines in regard to handling charges and that markups of 100% to 200% on laboratory procedures are being received. After some discussion, it was the opinion of the Committee that this practice should be discouraged and recommended that Blue Shield follow AMA's guidelines for laboratory procedures and specifically recommended that Blue Shield request the name of the outside laboratory performing any work and the amount of the laboratory charges to the physician.

The Committee feels it appropriate to restate the guidelines developed by the AMA and KMA as stated above.

3. The Committee was advised that many claims for lab and x-ray services are being received at Blue Cross and Blue Shield indicating a "possible" diagnosis as a reason for making claims under certain Blue Cross and Blue Shield contracts. Listing the "possible" diagnosis does not enable the claims reviewer or medical consultant to determine whether or not the tests or x-rays were medically indicated and suggests a screening device, or routine studies, which are not covered under the various certificates. The Committee felt that the membership of KMA should be urged to supply supportive documentation for all claims submitted, recommends that Blue Cross and Blue Shield insist on documentation of these matters, and supports the Plans' denial of any claim when the medical indication is not documented.

Alternative Delivery Systems

Mr. Haberle reported on the current status of various alternative delivery systems now set up in Kentucky. He noted that the 1974 KMA House of Delegates approved a resolution submitted by the Board of Trustees supporting the open panel approach to HMO development and recommended supporting programs in line with the types being developed by Blue Shield and Blue Cross. He pointed out that the development timetable has been somewhat complicated by various problems including the delay in finalization of both federal and state regulations with regard to HMO development. He also noted that the attempts to structure the state regulations in a manner that will allow recognition of the open panel approach has been successful. This was accomplished as the direct result of the organized efforts of the Kentucky Medical Association, the Kentucky Hospital Association, the Jefferson County Medical Society and Blue Cross and Blue Shield. In closing, he indicated that there was an urgent need to finalize the program format in order that an Alternative Delivery System jointly sponsored by the medical profession and Blue Shield could be offered as an option to the federally funded closed panel HMOs throughout the state.

Utilization Review

Staff reported on the Kentucky Utilization Plan which is a data gathering system based on hospital admissions. There are currently 61 hospitals in Kentucky subscribing to this program. In addition, there is a Blue Cross Utilization Review Program which generates statistics on Blue Cross admissions. This is

a free service for hospitals and provides information comparing hospitals of similar size with regard to length of stay and ancillary services.

This Committee, in its role of maintaining a close working liaison with Blue Cross and Blue Shield, hopes to continue to reflect the policies of this Association and to provide assistance in the upgrading of Blue Cross and Blue Shield coverage for our citizens.

Kenneth P. Crawford, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Advisory Committee to Blue Cross-Blue Shield, except the last two lines on Page 20.7, pertaining to that section entitled "Physician Cost Awareness Plan" to the last paragraph on Page 20.8, was reviewed by the committee and they commend it for its diligence. Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee on Health Care of the Poor

Although the Committee on Health Care of the Poor did not meet this Associational year, the members have received informational material, including a special report on Health Care of the Poor prepared by the U. S. Public Health Service.

One of the articles in the Public Health Service report points out that in any discussion of this subject, a single point to remember is that it is difficult, if not impossible, to categorize the poor into racial, ethnic or geographic identities. Many live in areas that experience inequities in access to optimal health care, such as the crowded inner city, the Indian reservation and the remote rural areas.

Informational studies have been made by and for our Committee on the idea of a multi-county, miniclinic, which would provide primary care and have a working arrangement and availability to secondary and tertiary care centers, including one in Webster County. It is our understanding that a clinic, similar to the proposals of the Committee on Health Care of the Poor, will be opened in Webster County late this summer. This project will be followed with interest.

The problems of health care of the poor are not easy to resolve. Because of their diverse nature, separate activities are covered by many committees of the Association. This seems fitting and proper rather than having one special committee. I, therefore, recommend that the Committee on Health Care of the Poor be discontinued.

I would like to take this opportunity to thank the members of this Committee for their good work and cooperation.

Robert C. Long, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on Health Care of the Poor was reviewed by the committee. The committee takes exception with the recommendation that the Committee be discontinued and recommends instead the Committee's reorganization to better advise the Board of Trustees as to the health care needs of the poor of our state.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the Claims and Utilization Review Committee

KMA claims and utilization review activities have maintained a constant and perhaps slightly increasing level through this year with the bulk of review being performed at the county society and trustee district level. All committees combined reviewed a total of approximately 500 claims submitted from commercial insurance carriers, third party payors and governmental medical programs.

Although the efforts of the Claims and Utilization Review Committee were not increased, they were certainly intensified in review of matters on appeal and considering precedent situations. Even more emphasis has been placed by the Committee as well as by submitting parties, on review of situations involving questions of quality of care.

In accordance with guidelines developed by the Committee and approved by the KMA Board of Trustees, the Claims and Utilization Review Committee operates on a calendar year basis and Committee members retire January 1. During this year, Committee members were replaced in the specialties of Plastic and Reconstructive Surgery, Colon and Rectal Surgery, Oral Surgery, Family Practice, Otolaryngology, Neurosurgery, Orthopedics and Allergy. Operation on a calendar year basis is accomplished to avoid confusion which may arise from other organizational changes.

The state Committee, as administrative head of the peer review mechanism, also instituted a new time limit for processing claims by county society and district committees. From the date of receipt of a claim in the Headquarters Office until the submitting party is advised of the review committee's recommendations, no more than 60 days time should elapse. If this time period is exceeded, the delinquent claim will be reviewed by the state Committee. This procedure was begun in the interest of the patient and the physician. In instances where review might take a great deal of time, the patient could be penalized to the extent that he would not be able to settle his claim with his physician, or physicians would be penalized to the effect that their bills would not be paid in a timely manner.

Since its first appointment, the Claims and Utilization Review Committee has performed all adjudication based on the usual, customary or reasonable concept as dictated and reaffirmed several times by the House of Delegates. Recent activities have served to reaffirm the validity of this concept when applied to peer review. With regard to fees and utilization, the Committee's responsibility has been interpreted not as a dictatorial body which mandates what a physician may rightfully charge his patient or how he should run his practice, but rather to determine the

reasonable liability of a carrier to pay for his services and to comment on quality of care thereby reflected as based on charges and care patterns exhibited by other physicians in the state. Only similar peer experience can be objectively relied on to perform objective peer review. Rather than being a convenient vehicle for insurance carriers, we feel that the contemporary review system is one of the last and certainly one of the strongest voices organized medicine has in protection of the profession. From a strictly political standpoint, were it not for peer review, those agencies and organizations which now pay for a great deal of medical care could arbitrarily and without question allow whatever fees and utilization of services they wish.

On the basis of the above comments, I believe it is incumbent on every member of the Association to join with me in expressing my deep appreciation and gratitude for the work done by members of county medical society and trustee district peer review committees. Realistically, their work consists of tedious, time-consuming review of seemingly endless medical charts and claims records where the end result and reward might often be feelings of ill will from their peers. But on a higher level, the effects of their work on the quality of care rendered in Kentucky as well as aspects of restricting governmental and third party intervention are quite likely some of the best undertaken by the profession on behalf of the profession.

I would like to extend my special personal thanks to the retiring members of the Claims and Utilization Review Committee this year who are Andrew M. Moore, M.D., Orville T. Evans, M.D., James E. Skaggs, Jr., D.D.S., H. Burl Mack, M.D., Lowell Martin, M.D., Robert M. Runge, M.D., and Maurice Kaufman, M.D.

W. Neville Caudill, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Claims and Utilization Review Committee was reviewed and the committee recommends its adoption. It especially commends the Committee on its excellent service and joins with the Claims and Utilization Review Committee in thanking its retiring members.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Community and Rural Health Committee

The Committee on Community and Rural Health held one meeting this year. Of maior concern at that meeting was the desire of the KMA House of Delegates to have the Committee continue and expand its interest in the area of alcoholism and drug abuse.

We were pleased to have representatives of the Division of Alcoholism, Drugs and Occupational Programs of the Kentucky Bureau for Health Services at our meeting and considerable discussion was held on the possibility of jointly sponsoring a meeting on alcohol abuse. Although we did plan a program, we learned that the University of Louisville had planned a similar program and felt it would be in the best interest of all concerned to lend our support to the school's project since it had already been finalized. The meeting was held in early May in Louisville and was highly successful. The Committee hopes to work with the University and the Bureau of Health Services next year in following through on the program the Committee planned for this year.

The Committee continues its strong interest in immunization programs and participated in the promotional efforts of several national groups last year in publicizing the need for immunization of children. The Committee supported the measure through information in the *KMA Journal* and *"Communicator."*

We have also continued our participation, in an advisory capacity, with the program now going on in conjunction with University of Kentucky School of Engineering and University of Kentucky College of Medicine, regarding traffic accidents involving recreational vehicles. It is anticipated that this study will point out deficiencies in recreational vehicle construction, safety and driver training and will possibly result in regulations making Kentucky's highways safer.

Among other areas of interest to the Committee are the continuing study of methods of diagnoses, treatment and control of tuberculosis; working with other organizations in providing necessary leadership to improve public health and mental health in Kentucky and advising and recommending policies to the Board of Trustees to accomplish the above objectives.

It has been a distinct pleasure for me to serve as Chairman of the Committee through the past Associational year. I appreciate the interest, attentiveness and active participation of the Committee members in the Committee's activities.

Stephen B. Kelley, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on Community and Rural Health was reviewed by the committee and the work of this Committee in the area of alcoholism and drug abuse is particularly noted. Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee on School Health, Physical Education and Medical Aspects of Sports

The Committee on School Health, Physicial Education and Medical Aspects of Sports had one meeting this year on May 15, 1975, in conjunction with their annual Medical Aspects of Sports Seminar, sponsored jointly with the Kentucky High School Athletic Association and the Eastern Kentucky University. This meeting was held in Richmond, Kentucky, on the grounds of the University. It was an excellent meeting highlighted by a series of lectures by Doctor A. J. Ryan, who is the team physician for the University of Wisconsin and Director of Student Serv-

ices. Doctor Ryan, a board certified surgeon, is a world reknown authority on sports injuries and is the Editor-in-Chief of *Sports Medicine Magazine.* Attendance by physicians, coaches, trainers and student trainers was good.

Also, the Committee was particularly interested in high school wrestling and the medical problems concerning young students using various weight-losing techniques to "make weight". It was noted that death and renal disease can result from these extreme attempts by these young people to have sudden loss of weight. A letter was sent out to every high school wrestling coach in the state advising them of this Committee's concern over the hazards of rapid weight loss practices, and the potential harm that could be done to these young athletes in an attempt to discourage such activity. Also, the Committee is presently in the process of adopting a method to determine optimum weight for student wrestlers, to assure that unreasonable weights are not being attempted by these young athletes.

It was decided at this meeting to no longer hold the Seminar regularly at Eastern Kentucky University, but instead to move it around the state, if possible: or possibly, have it in conjunction with the Boys State High School Basketball Tournament in Louisville as a half-day meeting to precede the sessions of the basketball tournament.

In addition, it was noted by this Committee that physicians were not always available at State-sponsored tournaments in high school baseball, basketball and foo·ball, and the Committee is working with the Kentucky High School Athletic Association to see that a member of the Committee or some other appropriate official in each local community will be available at the games to provide medical care.

The medical-legal aspects of being a team physician were studied this past year and at the present time this Committee is negotiating with the KHSA Association on developing contracts between team physicians and member schools and school boards.

Also, the Committee decided to write the ABC-TV Network and encourage them to rebroadcast their special on high school football injuries in the first or second week of August this year to acquaint coaches, parents and team physicians with the hazards of high school football without adequate conditioning, coaching and medical participation.

As usual, the committee held their annual summer seminars in each region of the State to discuss with high school football coaches all aspects of preseason conditioning for football and treatment of related injuries.

The committee thanks the Board of Trustees; the officers, and our assistant in the KMA office, Mr. Jerry Mahoney; for all the assistance they have provided us through this year.

Ronald E. Waldridge, M.D., Chairman

Recommendations, Reference Committee No. 4

The committee reviewed the report of the Committee on School Health, Physical Education and Medical Aspects of Sports. The Committee is to be commended on the excellent long-term program it is pursuing, the vigor and dedication of the Committee and its leadership and the breadth of its interests.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Health Manpower and Placement Services Committee

The Committee continued its involvement with matters of health manpower and allied health personnel. Of ongoing interest was the subject of the physicians' assistant. The Committee noted that approximately 37 states now have laws pertaining to physicians' assistants and, likewise, feels that any legislative attempts during the 1976 Session of the Kentucky General Assembly should be supported. In the absence of supportive or permissive legislation, physicians' assistants utilization will be limited.

Through this Committee, KMA was represented at the AMA Third Annual Health Manpower Congress where topical information was disseminated in areas concerning foreign medical graduates, physician distribution and continuing medical education.

The development of area health education systems in the state was reviewed, and it was learned that five regions will have been chosen within this biennium (1974-1976). The basic concept of the AHES is to coordinate, improve and help make available more health manpower training programs in the selected regions. It is hoped that this will have a positive effect on some of the maldistribution problems in Kentucky.

Two major concerns of the Committee this year related to direct supervision by physicians of non-physician health personnel and the number of medical residency programs as compared with the number of graduating medical students. In order to establish positions on these subjects, the following two policy recommendations were made to the KMA Board of Trustees, which, at its meeting on April 10, 1975, approved them as they appear here.

Direct Supervision by Physicians of Non-Physician Health Personnel, and "Independent Practitioners"

SUBMITTED BY: KMA Health Manpower and Placement Services Committee

The Health Manpower and Placement Services Committee has, for some time, given close attention to the practice and status of allied health and nursing personnel and has identified two major concerns. There appears to be some confusion in the meaning and use of the terms "independent" and "supervision" when used in relation to "physicians' extenders," that is "physicians' assistants," and some categories of nursing personnel.

Based on the studies of the Committee, it is our recommendation that the KMA Board of Trustees go on record as opposing the development or recognition of any non-physician **independent** "physician extender". However, when non-physician health personnel are **employed by or working** under a physician to whom they are responsible, the distinction between direct and indirect supervision on the part

of the physician should be left to the decision and discretion of the individual physician in the light of the particular circumstances affecting his care of the patient.

Recommendation to the KMA Board of Trustees Concerning Medical Residency Programs

SUBMITTED BY: Health Manpower and Placement Services Committee

The Health Manpower and Placement Services Committee has been made aware of the fact that the Commonwealth presently has available less first year residency positions than there are annual graduates from its two medical schools.

It seems perfectly obvious to us that at least one way in which to insure an adequate retention of Kentucky medical school graduates is to provide ample residency opportunities for them within the Commonwealth.

In an effort to focus the Association's attention upon this matter, the Committee unanimously recommends that the Board of Trustees of the Kentucky Medical Association endorse and support as an **initial** objective the increase of first year **primary care** residency positions within the Commonwealth to a point where the total number of available residencies are at least equal to the number of annual medical school graduates.

Joseph P. Hamburg, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Health Manpower and Placement Services Committee was reviewed. Of special notice is the Committee's efforts in defining the role of physicians' assistants. The Committee is to be commended on its efforts to provide sufficient first year primary care residency positions within the Commonwealth of Kentucky to accommodate Kentucky medical school graduates.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the KMA Advisory Committee to KPRO

Since September, 1974, when the KMA House of Delegates endorsed the Kentucky Peer Review Organization (KPRO) as the statewide PSRO there have been many significant developments in the whole area of federally mandated peer review—both on the national and state level. I shall try to highlight some of these developments in order to illustrate where KPRO has been, is now and may be headed.

In October, 1974, KPRO held its first open meeting. The members in attendance elected a Board of Directors which then elected the corporate officers. At that time a plan for PSRO implementation in Kentucky had already been developed and approved by the KMA and other health care organizations. This plan envisioned rapid establishment of a statewide review program utilizing a highly sophisticated computer network with terminals in each hospital. It also called for all non-physician personnel involved in the review process to be trained and employed by KPRO. Data processing would be contracted out to a computer firm with KPRO having full control over input and access to the computerized data.

The review activities were to include:

Admission Certification—justification of hospital admission

Concurrent Quality of Care Assessment—services consistent with the diagnosis, i.e., "the cookbook" of things which could or should be ordered.

Length of Stay Evaluation

Medical Care Evaluation Studies—medial audit-type review performed on charts after discharge of the patient.

Profile Analysis—performance review of institutional and individual providers.

The KPRO plan was distributed to hospitals and other interested parties and another meeting of the Board of Directors was scheduled for early December to receive comments and criticisms of the plan from all parties and to make any necessary final revisions of the plan before its submission to DHEW.

Shortly before this December meeting, several bombs dropped.

Utilization Review Regulations

In late November, the Secretary of Health, Education and Welfare published proposed Utilization Review Regulations. These require that all hospitals receiving Medicare and Medicaid funds perform review activities similar to those mandated in the PSRO law. However, there were (and are) very important differences between the utilization review regulations and a PSRO program. The U. R. regs demanded that **each** hospital develop individual norms, criteria and standards for most diagnoses, set up a review program encompassing the types of review described above, hire and train the personnel necessary to do so, and have the whole thing operational in two months (February 1, 1975).

This program is administered by the fiscal intermediaries for Medicare (and state agencies for Medicaid), but actually these intermediaries have little independence of judgment or action since they are bound by strict rules and regulations developed by the Social Security Administration. Thus, under the U. R. regs the policies and management of the review system are determined in Washington by Social Security Administration (SSA) bureaucrats with little or **no** physician input. That these SSA administrators have meager understanding of the peer review process—much less the human factors involved therein—is attested by the fact that they have had to move the date of implementation back twice and, as of the time of this writing, are under court injunction, further delaying implementation pending judicial review of their regulations.

I would like to re-emphasize that these U. R. regs are **not** part of the PSRO program. Virtually everyone involved with PSRO's across the nation has reacted with disfavor to these regulations. Most strongly suspect that the precipitous imposition of the U. R. regs was a blatant attempt by the SSA to establish its pre-emininence in federally mandated peer review,

and thereby eventually to be appointed the controlling agency for all PSRO review. Such control would significantly increase the already considerable bureaucratic and political power of the SSA. At the very least, these regulations have produced massive confusion and resentment among physicians and hospitals as these latter have scurried about trying to develop and institute the required review plans and activities—not to mention the tremendous amount of wasted effort and money involved, since much of this work simply duplicates that which has already been done by the PSRO's or will have to be discarded and revised when the PSRO's assume review responsibility in 1976.

HEW Policies Regarding PSRO's

Shortly before the December KPRO Board meeting, DHEW announced several developing policies which the Board felt could seriously compromise the integrity and autonomy of KPRO. Specifically, those policies which caused most concern were:

—Data Processing—DHEW considered geographically grouping PSRO's and requiring all those PSRO's in a given area to use a single computer contractor of its (DHEW's) choosing. The Board felt that this would jeopardize its control over the confidentiality of data, the processing of data and the ready access to the results of this processed data.

—Health Care Coordinator Employment and Training—DHEW policy is that only in those hospitals which are "non-delegated" will the Health Care Coordinator (HCC) be an employee of KPRO, and a mandatory training program could not be required of non-employees. In "delegated" hospitals (i.e., those which set up and do their own review, reporting to and monitored by KPRO), the HCC will be employed and trained by the hospital. (The cost of such review is considered an "allowable" administrative expense for purposes of federal reimbursement, but in those hospitals which chose to review only federally financed patients, the review costs are spread over the entire patient population including those whose care is not reviewed. This, by the way, is the method by which the past and present federally mandated review had been funded and although one questions the fairness of the method, it is not a new policy). The Board's primary concern here was that if a standard training program was not instituted for the HCC's statewide, the methods of data collection, interpretation and processing would not be comparable among those coordinators who had had varying training and experience. Thus, the validty of KPRO's statistics would be suspect.

—Appeals—whereas KPRO's plan called for a level of appeal from adverse Physician Advisory (P.A.) decisions at a regional (and/or state) level, it appeared in December that the only level of appeal (short of going to the Secretary of HEW) would have to be to the utilization review committee of the involved hospital. The Board felt that there should be available an appeal panel outside the immediate hospital staff to avoid potential conflicts and animosities arising, particularly in those hospitals with relatively small staffs.

—Bylaws—DHEW Legal Staff felt that our method of electing directors at an annual meeting of the membership was not permissible and that such election would have to be carried out by a mail-in ballot provided to all members. We were also advised that "slotting" of directors according to geographic areas within the PSRO would not be allowed.

It should be noted that in the immediately antecedent section of this report we have been discussing "policies" as opposed to "regulations" in the earlier section. This is very significant. Policies can be changed easily within the Department. Regulations, on the other hand, once published in the Federal Register have the force of law and can be rescinded only by the Secretary of the Department which drew them up or by a special legislative act passed by Congress. To date, there have been virtually **no** regulations published for the conduct and management of PSRO's. Thus, PSRO's are currently operating under "policies" and "guidelines". The important thing here is that these are relatively easily changed if experience or reasonable outside criticism indicates that they should be changed. This has, indeed, been the case with PSRO's, and it is my personal feeling that this has been due to the fact that the development of the professional aspects of the PSRO program have been assigned to the "Health" portion of the DHEW establishment (represented by the Bureau of Quality Assurance and Office of Professional Standards Review, both of which are parts of the Public Health Service) in contrast to the SSA which is essentially the "Welfare" portion of HEW.

KPRO Status

Over the past several months the KPRO Board and its officers have had several meetings and negotiating sessions with regional and national PSRO program officials. These contacts, plus correspondence, criticism by other PSRO's faced with similar problems, and budgetary constraints, have persuaded HEW to change some of its policies. Those changes along with some concessions by the KPRO Board to the realities of implementation and available funding, have allowed the Board to submit a final plan for PSRO implementation in Kentucky which is not conceptually changed to any significant degree from the initial plan, and further, which, in comparison to the original plan, will be less complicated, less expensive and less intrusive into the day-to-day practice of medicine.

The Board's areas of concern have largely been satisfied. Thus:

KPRO will be allowed to select its own computer firm for data processing.

Delegated hospitals will still be responsible for employment and training of their HCC's but funds will be allowed for KPRO to set up training programs for HCC's and KPRO can require that hospital-employed coordinators meet its standards of performance and procedures.

For non-delegated hospitals and for delegated hospitals which wish to avail themselves of it, there will be a regional committee to review adverse decisions of the local physician advisor. (These committees will also have important input into the modification of KPRO norms, standards,

and criteria in order to meet local conditions).

Election of Board members must still be by mail-in ballot, but the nominating committee will be allowed to consider geographic representation when formulating its recommended slate of Board nominees.

In addition to the resolution of these problems there have been some other encouraging develoments affecting KPRO:

The implementation of PSRO in Kentucky will not occur "in one fell swoop", but will be phased-in. KPRO will be allowed to start with a few representative pilot hospitals. Based upon its experience with these, KPRO will try to work as many "bugs" out of the system as possible before expanding its review activities in step-wise fashion to involve all 122 hospitals in the state which require PSRO review.

The concept of the statewide computer network with remote terminals in each hospital has (wisely, I think) been abandoned as being too complicated, too centralized and too expensive for the relatively simple type of review which will now satisfy the federal requirements.

The requirements for "concurrent quality of care review," (i.e., the "cookbook") has been dropped.

The AMA-developed, HEW-approved, Suggested Criteria for PSRO's are much more flexible and liberal than most of the criteria-sets which have been developed by individual hospital utilization review committees for their own use.

Confidentiality guidelines developed by HEW preclude for purposes of civil litigation both "discovery" and subpoena of confidential information developed by PSRO review. Furthermore, no employee of the PSRO, nor participant in the review process (whether physician or not) may be subpoenaed to provide such information.

The guidelines for the review process as evolving in the several revisions of the "PSRO Program Manual" are becoming progressively less stringent and more permissive of individual consideration in response to individual circumstances.

These developments indicate that, under present administration and development, PSRO's should evolve as the type of peer review which many of us espoused long before the Bennett amendment.

With physician participation and local control the PSRO should be primarily educational in nature and secondarily, a means of identifying and correcting practices and procedures which are wasteful of medical resources or even potentially harmful to our patients. Only with physician participation and guidance can these objectives be obtained. Without physician input and administration, federally mandated review **will be done.** The actions of the SSA prove this to be true and the laws giving this authority will still be in effect even if the PSRO amendment is repealed. There are those physicians who counsel that non-participation in PSRO review will cause it to go away. They are quite right. The Professional Standards Review Organization will die. But waiting in the wings, eager to assume the power of deciding which medical services should be apportioned to whom, is a **non**-professional standards review organization, a group of self-appointed medical experts who would deal with statistics instead of people, costs instead of illness and theory instead of reality.

In 1974 the federal government spent 24 billion dollars for direct medical services. In 1975 it will spend $40 billion. In less than five years this figure will approach $100 billion. Anyone who thinks that the government will expend such funds without some assurance that the money is well spent is naive. We have a choice as to who will make the determination that federal funds are being well spent. It will either be us, acting locally with full consideration of local needs and realities, or them, in Washington making decisions on the basis of actuarial reports rather than human needs.

KPRO has submitted its final plan for PSRO implementation. It is expected that KPRO will be designated a "conditional" PSRO in late fall or early winter. It will not start formal review before May or June of next year. This review will begin only in a relatively few hospitals at first. The scope of review and the hospitals involved will then be progressively increased over the next year. This is the status of PSRO now.

As a personal note, I am not employed by KPRO. I am a solo, private practitioner. Over the past year I have become progressively more aware of implications of federal medical care review, the possibilities of whom may do this review and the potential effects that these factors may have on the care of our patients. Although at the outset of this year I had "grave reservations" about PSRO, I am now of the opinion that it is the best of the possible alternatives. I would encourage the KMA and all Kentucky physicians not only to participate in KPRO but to exert all possible efforts to insure that the review of the necessity of medical care be always the responsibility of those who must deal with it on a day to day, personal basis.

W. Neville Caudill, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the KMA Advisory Committee to KPRO was reviewed by the committee. The committee is to be commended on its handling of a very difficult controversial matter and its concise report.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Chairman, Board of Trustees

Portion Dealing with the Report of the Ad Hoc Committee to Study Peer Review Expenses Only

When peer review first became a formal activity of the Association in 1968, related expenses were nominal and costs incurred by the Committee were no more than costs required for the function of any KMA committee. In 1971, the larger county societies were encouraged to form peer review committees and Trustee District Review Committees were formed and

resulting expanded activities increased peer review costs. Between 1968 and January, 1973, thought was given several times to charging a fee for performing review on a per case basis. As the peer review mechanism evolved, the claims review volume continued to increase to the point where expenses incurred by the Association had become quite substantial. As of January 1, 1973, a $10 per case fee was instituted and charged to submitting insurance carriers to help defray expenses.

At the time that the $10 per case fee was instituted, peer review activities were a function of the Kentucky Foundation for Medical Care. Monies compiled did not meet all direct costs, nor was it the intention of the KFMC Board of Directors to make a "profit" because of the feeling that the responsibility for performing peer review was an obligation to the profession by the profession. As part of the guidelines adopted when the review charge was begun, the Board also voted that the full $10 fee would accrue to those county medical society review committees whose society employed two lay staff members or more.

In 1974, consideration was given to raising the fee. It was agreed, however, that rather than imposing an arbitrary fee increase to carriers, some objective method should be developed related to actual costs. This Committee was, therefore, formed to render opinions and recommendations concerning the fee.

At its initial meeting, the Committee agreed that all expenses incurred by the Headquarters Office in handling claims as well as expenses related to operation of the state Committee should be closely maintained for a period of three months in order to compile expense records. Expenses by local and regional committees for such items as postage, stationery, secretarial expenses and so forth were also to be compiled because the chairmen of these committees often were required to make out-of-pocket expenditures.

Expense data was, therefore, compiled from October, 1974, to January, 1975, and reviewed in detail by the Committee. To determine a probable cost, all expenses for each committee were totaled and divided by the number of claims reviewed to arrive at a cost per claim figure. Added to this figure were the expenses by the KMA Office for processing the claims. Physicians' time was not included, but figures for physicians' mileage were, because mileage was, in fact, an out-of-pocket expenditure.

With regard to charging for physicians' time, it had been agreed that peer review was performed as a function of the medical community and was a service that KMA offered its membership. Consideration of charging a fee at all was based on the fact that non-professional expenses for offering this service had greatly mounted.

On the basis of this information, it was agreed that the Committee would recommend to the KMA Board of Trustees that a figure of $20 per claim be charged to carriers. It would be further recommended that component peer review chairmen be requested to report office and secretarial expenses quarterly. These expenses and physician miles traveled would be reimbursed if a physician was required to travel over ten miles one way to a review committee meeting. Upon receipt of these quarterly reports the KMA Office would issue reimbursement checks to chairmen.

W. Neville Caudill, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Chairman, Board of Trustees; Pages 5.16-5.18 pertaining to Ad Hoc Committee on Peer Review Expenses and Memo from Board of Trustee, **only** was reviewed by the committee. The committee noted that a $20 per claim fee to carriers for review was recommended and has subsequently been revised to $25. This committee concurs with the report of the Ad Hoc Committee.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Resolution C

Allen County Medical Association

WHEREAS, the Kentucky Medical Association is a democratic organization which represents the physicians of Kentucky, and

WHEREAS, the Kentucky Medical Association was directly or indirectly responsible for the formation of KPRO, and also has some influence directly or indirectly on the operation of KPRO, and

WHEREAS, there are approximately 3,700 practicing physicians in Kentucky, and of this number approximately 1,300 are engaged in the general practice of medicine and surgery, and

WHEREAS, the KPRO Board of Directors is composed of approximately 15 members, of which only one is engaged in the general practice of medicine and surgery, and

WHEREAS, the Kentucky physicians engaged in general practice, who provide approximately one-third of all medical services rendered by physicians in Kentucky, are neither adequately nor proportionally represented on the Board of Directors of KPRO; be it therefore

RESOLVED, that the Kentucky Medical Association correct this lack of proportional representation by recommending and encouraging the appointment to the KPRO Board of Directors additional general practitioners sufficient to make the ratio of general practitioners on the Board of Directors to total membership of the Board of Directors approximately equal to the ratio of general practitioners in Kentucky to total practicing physicians in Kentucky.

Recommendations, Reference Committee No. 4

Resolution C was reviewed and discussed. The committee agrees in principle with the spirit of the Resolution, but feels adequate provisions are present in the KPRO Constitution for its implementation. The committee recommends that this resolution not be approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Resolution H

Shelby-Henry-Oldham Medical Society

WHEREAS, Kentucky Blue Cross-Blue Shield, Inc. is the largest health insurance carrier in Kentucky and

WHEREAS, this has been accomplished in cooperation with the physicians of the State of Kentucky, who have supported Blue Cross-Blue Shield in many ways, and

WHEREAS, the coverage offered and supplied to the insured is overbalanced in the direction of hospital payments as compared to physician payments, and

WHEREAS, payments are made to hospitals for certain out-patient services which are denied the patient and physician for identical services supplied in the physician's office, and

WHEREAS, this results in a financial penalty to either the patient or the physician by the denial of coverage which the insured has paid for; be it therefore

RESOLVED, that the Kentucky Medical Association strongly urge Blue Cross-Blue Shield to rectify this unjust and illogical coverage of the insured, by making it possible for the insured to be equally covered as an out-patient in either the hospital or the physician's office.

Recommendations, Reference Committee No. 4

The committee reviewed Resolution H, introduced by Shelby-Henry-Oldham Medical Society, agreed in principle, but recommends its rejection in favor of the following substitute Resolution:

WHEREAS, payments are made by Blue Cross-Blue Shield to hospitals and physicians for certain out-patient services which are denied the patient and physician for identical services supplied in the physician's office; be it therefore

RESOLVED, that the Kentucky Medical Association direct the Advisory Committee to Blue Cross-Blue Shield to seek to rectify this unjust and illogical coverage and report back through this Advisory Committee at the next Annual Session.

Mr. Speaker, I move the adoption and implementation of this section of the report.

Following discussion of Resolution H and the Report of the Advisory Committee to Blue Cross and Blue Shield considerable testimony was heard concerning financial problems arising from medical liability premium inflation and its effect on the UCR Program. The committee wishes to present the following new resolution to implement this discussion:

WHEREAS, rapidly rising and unpredictable premiums for medical liability insurance may require unforeseen fee adjustments, and

WHEREAS, the Usual, Customary and Reasonable concept is based on a retrospective analysis; therefore be it

RESOLVED, that the Kentucky Medical Association direct the Advisory Committee to Blue Cross-Blue Shield to take cognizance of this problem and seek its remedy.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution X

Robert E. Smith, M.D.

WHEREAS, since the American Medical Association has brought suit against the Secretary of Health, Education and Welfare's promulgation of the "concurrent review" regulations (promulgated on 11-29-74 and effective on 2-1-75), and

WHEREAS, because of this action the American Medical Association has given hope to the members of the Kentucky Medical Association that a legal and professional stand against government intrusion into the practice of medicine is possible based in part on their argument in the suit that "The aforesaid regulations unlawfully interfere with the right of licensed physicians to practice their profession in accordance with their best medical judgment and with the rights of patients to be hospitalized in accordance with such judgment", therefore be it

RESOLVED, that the Kentucky Medical Association House of Delegates judges that the Kentucky Peer Review Organization "Application for Conditional Designation" substantially implements the same methods of "concurrent review" as enjoined by the American Medical Association in their suit and fosters the same government interference in the exercise of the best medical judgment of the physicians in this State in the care of their patients; and be it further

RESOLVED, that the President of the Kentucky Medical Association contact each licensed physician in this State informing him (her) that his (her) participation in the activities of the Kentucky Peer Review Organization should be carefully considered since such participation is not mandated by law on an individual physician basis and since such participation may be harmful to the proper, ethical and professional care of their patients; and be it further

RESOLVED, that the House of Delegates of the Kentucky Medical Association directs the delegates and alternate delegates from the Kentucky Medical Association to the American Medical Association to introduce a resolution at the next meeting of the American Medical Association House of Delegates which would direct a filing by the American Medical Association of a suit in the proper Federal court contesting the legality and constitutionality of Public Law 92-602 (the PSRO law); and be it further

RESOLVED, that the Kentucky Medical Association will file an amicus curiae brief (suit) in support of the American Medical Association suit against Public Law 92-603 and that if the American Medical Association has not filed by 2-1-76 the aforesaid suit that the Kentucky Medical Association so file its own suit in the proper Federal Court against Public Law 92-603 and that such legal costs be paid by assessment of the membership of the Kentucky Medical Association in such amounts and at such intervals as are necessary.

Recommendations, Reference Committee No. 4

Resolution X was reviewed and considerable testimony heard. The committee recommends that this resolution not be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 4 as a whole.

The motion was seconded and carried.

Mr. Speaker, I wish to thank the members of this committee, Doctors T. J. Ferriell, Jr., Robert K. Johnson, James P. Moss and N. H. Tally, and Mrs. Laura Hamm for preparing this report.

REFERENCE COMMITTEE NO. 4
Walter R. Brewer, M.D., Lexington, Chairman
T. J. Ferriell, Jr., M.D., Elizabethtown
Robert K. Johnson, M.D., Covington
James P. Moss, M.D., Louisville
N. H. Talley, M.D., Princeton

REFERENCE COMMITTEE NO. 5

Danny M. Clark, M.D., Somerset, Chairman

Reference Committee No. 5 considered the following reports and resolutions:

21. Report of the Committee on Business Management and Services
24. Report of the Committee on Long Term Health Care
30. Report of the Committee on Governmental Medical Services
31. Report of the Technical Advisory Committee on Physician Services (Title XIX)
32. Report of the Advisory Committee to Selective Service
38. Report of the Committee on Public Relations
1. Report of the President; beginning with the last paragraph on Page 1.7 to the paragraph starting with "The State Legislature . . ." on Page 1.9, pertaining to Medicare and Medicaid, **only**
5. Report of the Chairman, Board of Trustees; Pages 5.10 through 5.13, pertaining to the Ad Hoc Committee on Foreign Medical Graduates, **only**
5. Report of the Chairman, Board of Trustees; pertaining to the Report of the Ad Hoc Committee on Mental Health-Mental Retardation, **only**

Resolution B—Medicaid Funding (KMA Board of Trustees)

Resolution K—Dissatisfaction with Part B of the Medicare Program (Jefferson County Medical Society)

Resolution L—Public Knowledge of Physician's Contribution to the Kentucky Medical Assistance Program (KMAP) (Jefferson County Medical Society)

Resolution T—Opposition to Federal Regulations Requiring All Skilled Nursing Facilities to have a Medical Director (Fayette County Medical Society)

Resolution Z—Kentucky Medical Assistance Program (Henderson County Medical Society)

Report of the Business Management and Services Committee

During the past Associational year, the Business Management and Services Committee reviewed plans and programs that it felt might provide tangible benefits to the members of KMA.

More than 700 physicians' offices, with 1,845 subscribers, are participating in the Blue Cross-Blue Shield group insurance plan. The Committee examined a proposal by Blue Cross-Blue Shield for improved benefits that included: (1) changing Blue Cross coverage from 70 days to 120 days per admission; (2) changing Blue Shield coverage from Schedule C or D to usual, customary and reasonable; and (3) changing major medical from $20,000 to $250,000 maximum. The Committee, at the request of the KMA Board of Trustees, polled the individual members of KMA who have this policy to see if they would desire to go to UCR or continue their present policy. The response was that 789 people from 263 groups desired the UCR option, and this plan went into effect for them on May 1, 1975.

The Executive Committee had requested this Committee to present a recommendation to the Board of Trustees regarding the travel plans KMA should utilize for the AMA Clinical Meeting in Honolulu on November 30 through December 5, 1975. The official agency for the AMA is Group Travel Unlimited. A brochure describing a 13-night, 14-day tour for $846 per person was included in the March issue of the "Communicator." A follow-up brochure was sent with the April issue. To date, 29 reservations have been made for KMA members and their families through Group Travel Unlimited.

The Committee reviewed the KMA endorsement of the General Leasing Corporation. A representative spoke to the Committee members about leasing arrangements for automobiles, office equipment and furnishings.

The Committee members also reviewed the KMA-endorsed Disability Insurance Program as administered through the A. P. Lee Agency. There are 830 physicians covered under this plan, and KMA endorsement was continued.

The Committee recognized that some KMA members may desire information regarding travel arrangements. A list of companies offering travel plans and the appropriate contact person will be maintained in the Headquarters Office for any member's use.

The Johnson Company of Owensboro, Kentucky, is in the process of negotiating for an insurance benefit program for KMA members for review by the Business Management and Services Committee. The Johnson Company will propose a group insurance program that will, in some cases, supplement presently-endorsed programs.

The KMA Travel Accident Policy is now covering 22 staff members and 425 KMA members with

$50,000 accidental death benefits and an aggregate limitation of $300,000. This policy was provided after review of competitive bids by the Business Management and Services Committee during the 1973-74 Associational year.

I would like to thank the members of this Committee for their fine service during this Associational year.

Harold D. Haller, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Business Management and Services and recommends that the report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee on Long Term Health Care

The Committee on Long Term Health Care was appointed as a result of Resolution W submitted to the 1974 session of the KMA House of Delegates which took note of the seemingly overwhelming number of restrictions and duplicated efforts required by regulations governing the operation of Skilled Nursing and Intermediary Care Facilities.

In an attempt to clarify the many regulations pertaining to nursing homes, the Committee reviewed a good deal of material gathered from such sources as the Department of Health, Education and Welfare, the State Division of Licensing and Regulation and the American Medical Association.

All discussions related to the probability of convening a seminar of interested persons and organizations so that group consideration could be given to some of the problem areas identified. Of major concern was the requirement promulgated by the Department of Health, Education and Welfare that mandated a medical director for all Skilled Nursing Facilities. The Committee recognized that this would be a difficult requirement to fulfill for many nursing homes.

One of the guidelines of the Committee's deliberations was the serious impact on the quality of care rendered in nursing homes that was created by an over-regulated atmosphere. Experiences of the individual members were related and these coincided with a report of the Subcommittee on Long Term Care of the United States Senate which implied that because of voluminous regulations to be complied with at the expense of time spent in patient care, coupled with relatively low reimbursement of allowable costs by the Title XVIII and XIX programs, the total care offered in nursing homes often suffered.

Major points finally identified for discussion at a seminar, in addition to those already mentioned, were the impact of PSRO on nursing homes and utilization review committees, the relationship between nurses, administrators and the physician staff, the relationship of a medical director to a nursing home, inconsistencies between requirements demanded by state regulations and the inspection criteria of state survey teams, and the need for streamlining regulations and operations required by these regulations.

In April, the administrators of all Skilled Nursing and Intermediary Care Facilities were contacted to determine their interest in attending such a meeting and also to learn what success each had had in securing a medical director. Contact was also made with the Kentucky Nurses Association, the Kentucky Association of Health Care Facilities and the State Division of Licensing and Regulation to determine their interest in participating in such a seminar. A very strong positive response was received to this correspondence and, without exception, interest in participating in such a seminar was expressed. Based on this response, tentative arrangements have been made to convene a seminar during the annual meeting of KAHCF in early December.

As planning progresses and with the approval of the KMA Board of Trustees appropriate announcements and informational items will be disseminated on the seminar. We are gratified to see KMA becoming active in an area of health care that affects such a large part of our population, and we sincerely hope that close cooperation between the nursing homes and organizations listed will realize some beneficial results.

Harold B. Barton, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Long Term Health Care noting that tentative arrangements have been made to hold a seminar of interested persons and organizations to discuss long-term health care. Reference Committee No. 5 recommends that the report be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the Committee on Governmental Medical Services

The Committee met formally once this year primarily to consider Resolution R referred to it by the 1974 session of the House of Delegates concerning Medicare and Medicare payments. Submitted by the Pennyrile Medical Society, Resolution R pointed out some traditional dissatisfaction physicians have expressed with regard to the Medicare Program, called on KMA to resolve seven major questions listed in the Resolution and directed that the Board of Trustees report back to the 1975 House of Delegates with information developed on the questions raised.

At its meeting the Committee was fortunate in having present representatives of the Metropolitan Medicare Office. Metropolitan serves as the intermediary for Part B of the Title XVIII Program in Kentucky. These questions were posed to the program representatives who had prepared written responses to each point. For the sake of brevity, each question listed in the Resolution and the respective

program representatives' summary of responses follow:

(1) **For payment purposes, the Commonwealth of Kentucky should be considered one payment area.** With regard to payment areas, the Part B Office was bound by regulation to delineate areas for payment purposes.

(2) **The 1974 KMA Session of the House of Delegates reaffirms its support of the UCR concept.** The term "usual" in relation to fees, was based on the prevailing fee charged within given areas and paid at the 75th percentile level. The 75th percentile fee was derived from a total of all fees billed to the program by all physicians in an area. "Customary" was defined as the usual fee charged over a given period of time by an individual physician. The Medicare program was bound to pay the 75th percentile of prevailing fees or the physician's customary fee whichever was lower.

(3) **Profiles for Medicare payment purposes should be updated at least annually based on physicians' charges and not Medicare allowances and not two years behind as is the current policy.** Fee profiles are updated annually. At the beginning of each fiscal year fees currently being paid are those derived from fees billed during one previous calendar year at the 75th percentile level. In computing updates, reimbursement is based on fees charged, not on Medicare allowances for given fees.

(4) **Disputed fees should be turned over to peer review (Kentucky Peer Review Organization) for arbitration that is binding on both parties.** The Part B Office pays all fees at the prevailing fee level unless there is a rare or unusual circumstance or procedure . . . In such a case, the Part B Office has available fifteen specialty consultants who make internal determinations on unusual or rare procedures or recommend referral to a peer review committee. Any party to a claim may request an informal review which consists of re-evaluation by someone other than the person who originally processed the claim. If the results of this informal review are not satisfactory, a Fair Hearing is scheduled where arbitration is conducted by an attorney. A final recourse would be a civil suit. At the present time these are the only policies that apply to Medicare claims processing concerning review and no guidelines have yet been established relating to PSRO.

(5) **Physicians with established practices in other states should be allowed to transfer their profile from one Medicare Office to another and this should be publicized to physicians.** Physicians' profiles are tranferred from state to state, but the reimbursement allowed is based on the prevailing fee level of the new state. The physician, therefore, receives reimbursement at the prevailing fee level or his customary fee level whichever is less.

(6) **Younger physicians entering practice should not be faced with the current inequitable payment of services for this is the same as saying his services are not as good as those of older colleagues.** According to Medicare regulations, new physicians are reimbursed at the 50th percentile of established prevailing levels. A new physician is placed in this category for a total of one fee update period or one year.

(7) **It seems inconceivable that the average or median UCR payments should vary as much as they seemingly do from state to state and information regarding this should be obtained.** A series of charts compiled by the Bureau of Health Insurance on fees currently being paid in the five states within DHEW Region IV on various physicians' services were reviewed. Variances were noted from state to state among the fees for the several procedures listed although there appeared to be no particular consistency in the variation. All fees in all states were determined by the charges billed by physicians and the resulting variations only reflected the difference in physicians' charges.

A copy of the full and complete response will be available for review during the Reference Committee meeting.

On the basis of these responses and discussion with the program representatives, the Committee noted that the intermediary in Kentucky has very little flexibility with regard to implementation of Medicare regulations and is therefore in no position to effect changes to any great degree. We would therefore recommend, that any revisions to Medicare regulations be sought legislatively at the national level in coordination with our state's Congressional delegation and appropriate officials of the American Medical Association.

With regard to informing the public of physicians' dissatisfaction with the Medicare Program we would urge that, if such action is taken, great care be given to differentiate between disagreement concerning administrative processes as opposed to the health care provided through the Medicare Program.

Frank M. Gaines, Jr., M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Governmental Medical Services, including the fact that the Committee noted the intermediary has very little flexibility with regard to implementation of the Medicare regulations. The Reference Committee would like for the Governmental Medical Services Committee, or such other committee as the KMA President might designate, to contact the Department of Health, Education and Welfare to see what can be done to change Metropolitan's interpretation of the Medicare regulations.

The Reference Committee also noted that the Board of Trustees, in approving this report, took note that changes in Medicare can be made through the judicial system, as well as legislatively.

Reference Committee No. 5 recommends that the report be accepted.

Mr. Speaker, I move the adoption and implementatio of this section of the report.

The motion was seconded and carried.

Report of the Technical Advisory Committee on Physician Services (Title XIX)

Your Technical Advisory Committee to the Medical Assistance Program in Kentucky (Title XIX) will meet a total of four times before the year's end. The last meeting of the Committee will not be until the last of September, however, at which time the Medical Assistance Advisory Council will meet.

A primary concern of the Technical Advisory Committee this year, and to KMA has been the reimbursement mechanism utilized by the Medical Assistance Program for payment of physicians' services. This year, (September, 1974, through September, 1975) did see an increase in physicians' reimbursement for out-of-hospital services and a change in the reimbursement mechanism for in-patient services.

Last year, a project was undertaken by the Medical Assistance Program to make the total reimbursement mechanism comparable to the system used by Medicare (Title XVIII). At that time KMA was advised by former Governor Wendell H. Ford that funds would be made available for payment of physician services for in-hospital care at the rate of 62 percent of usual, customary or reasonable rates. Because KMA was on record several times as favoring the UCR fee concept this was acceptable with the stipulation, however, that means be sought in the future to upgrade the 62 percent level to a maximum reasonable rate.

Later in the year it was seen that these funds were not forthcoming. At the December meeting of the Committee, the matter was again discussed and the Committee voted to recommend to the Advisory Council that the then current in-hospital reimbursement system of allowing flat fees be continued until such time as the UCR method could be implemented and that until then, physicians should be allowed the choice of methods of payments. Still later we learned that this option could not be allowed and that physicians must accept the UCR mechanism. Although these charges were to be paid beginning January 1, 1975, they were not in fact paid until July 1 with previous billings paid retroactive to January 1.

We would like to point out that conversion to the UCR payment mechanism is an affirmative step for the Medicaid Program, and we certainly endorse payment of UCR fees. However, although many physicians whose practice is centered mainly on hospital care will now receive payment for their services not allowed in the past, this new mechanism is prejudicial against primary care physicians who have participated in the program for some years. There is no easy solution to this resulting penalizing of primary care physicians other than payment of full UCR charges but it is worthy to note.

The subject of fees paid under Medicaid has been a constant concern over the past several years by all physicians in the state. Your Title XIX Committee has made every effort to bring about what it felt to be reasonable solutions to the problem when considered from all standpoints including the concerns of KMA, state government, budgetary constraints and the intent of the Medical Assistance Program. Throughout all our activities equal or more intense efforts were being put forth by KMA officers at high levels of state government and these actions have assisted in some improvements although not what might be hoped for.

In its role as an advisory group to the program, our Committee took several other actions concerned with administration of the program. A discussion of some of the major items follows.

Because of the requirement that Medicaid operations conform with those now used by Medicare, the Committee reviewed federal regulations pertaining to sterilization procedures which could be reimbursed under the Medicaid program and recommended their approval. The Committee also recommended that the Medical Assistance Program change its coding procedures to those listed in the 1965 New York Relative Value Scales. This was done to improve efficiency in the payment of claims, as the same coding system is now used by Medicare.

As one method of bringing primary care to underserved areas, the Medical Assistance Program had drafted procedures for the operation of Primary Care Centers. These too were reviewed by the Committee which recommended approval of them.

The Medical Assistance Program had proposed use of the AMA's Uniform Claim Form for physicians' billing, but upon consideration of this form the Committee felt that it could be simplified to the advantage of both the Medical Assistance Program and the individual physician. Revision of the form was undertaken and the form should be ready for use probably before the end of the calendar year.

In spite of the many difficulties physicians encountered with regard to the Medical Assistance Program, it has been very gratifying for me as Chairman to witness the continued and dedicated work by the members of the Committee. One hundred percent attendance at both the Committee meetings and meetings of the Advisory Council is the norm for our group, and I feel they are owed a great deal of thanks on behalf of KMA for their efforts. I feel we should also recognize KMA's representative to the Advisory Council and Chairman of the Council's Drug Formulary Subcommittee, Robert N. McLeod, M.D., who is an effective and vocal spokesman for Kentucky physicians to the Advisory Council.

H. Burl Mack, M.D., Chairman

Supplement to the Report of the Technical Advisory Committee

Every two years a Program Projections subcommittee of the Medical Assistance Advisory Council is appointed to make suggestions for program improvements and each Technical Advisory Committee is requested to make comments. Because of the importance of input into program projections, a special meeting of our Committee was held. The following recommendations were developed to be made to the Projections Subcommittee, which met in early August.

1. Because the Title XIX program is a **medical program,** we feel that there should be more input by physicians on the Advisory Council. We, therefore, strongly suggest that the number of physician positions on the Advisory Council be increased to three, either by Executive Order or through legislative means.

2. We recommend that reimbursement for physician's services in both inpatient and outpatient settings be upgraded to the full percentile allowed by applicable laws and that these rates be periodically revised to reflect realistic changes in economic trends. With regard to allowable reimbursement, we recommend that the minimum amount paid by the Medical Assistance Program for **any patient-physician** contact be $8.00.

3. We recommend that no new services be provided by the Medical Assistance Program until existing primary services are funded at a realistic rate.

4. As an administrative process, we request that actions taken by the program on recommendations of the Technical Advisory Committees be reported to the Advisory Council at the next preceding meeting.

5. As of January 1, 1975, the Medical Assistance Program implemented a mechanism for reimbursement of physicians' inpatient services based on 62 percent of usual, customary and reasonable fees as maintained by the Medicare Program. However, fees for bills submitted after January 1, were not to be actually reimbursed until July 1 retroactive to January 1. We recommend that physicians not be billed for any "over payments" made as a result of calculations under the new reimbursement system.

6. During Fiscal Year 1975, the Technical Advisory Committee on Physician Services recommended that the Medical Assistance Program use the 1965 New York Relative Value Scales for coding for claims payment purposes. This recommendation was made at the suggestion of the Program so that their administrative procedures would conform to those used by the Medicare Part B Intermediary which also uses the 1965 New York studies. Since that time, however, a revision to that publication, effective July 1, 1975, has been made available and its codes consist of five individual digits as opposed to four digits in the 1965 version. Due to the fact that the 1965 codes that are now being used are now ten years old, are not available and are obsolete, we recommend that the Medical Assistance Program convert to some five digit code system such as the 1975 New York Relative Value Scales, the 1974 California Relative Value Studies, or the AMA Current Procedural Terminology Codes.

7. We recommend that Certified Registered Nurse Anesthetists be paid appropriately for services by the Medical Assistance Program.

8. As a part of budget recommendations made by the Program Projections Subcommittee, we urge, in the strongest terms, that a reasonable increase in budgetary allocations specifically for **physicians' fees** be included.

A Medical Assistance Program representative was contacted by telephone during our meeting and asked about questions relating to these recommendations. Obviously, he could only respond to questions not associated with areas where no policy has been established. Replies to some of these questions are summarized as follows:

5. Physicians will not be billed for "over payments" occurring as a result of charges made between January 1 and July 1 under the new reimbursement system. Conversion to this system will probably not be complete until the end of the calendar year and many individual physician contacts may be made to resolve any problems.

6. The Medical Assistance Program will not convert to use of the 1975 New York Relative Value Studies for coding. The Medicare Part B Intermediary was contacted by the Medical Assistance Program and asked if changing from use of the 1965 Studies to the 1975 Studies was possible. The Medicare Office, it was reported, declined to make this change.

On the basis of this information, your Technical Advisory Committee recommends that the KMA Board of Trustees attempt to change the coding system used by both the Medicare Part B Intermediary and the Medicaid Program from the 1965 New York Relative Value Scales to a more modern, efficient and available system as indicated above.

7. Certified Registered Nurse Anesthetists can be reimbursed by the program but only if their services are included in charges made by hospitals.

With regard to the last recommendation concerning an increase in the Medicaid budget specifically earmarked for physicians' fees, we noted that the same recommendation had been made for the past two biennia, with obvious negative results. We, therefore, recommend that KMA, through its Committee on State Legislative Activities work to effect a specific increase for physicians' fees during the 1976 session of the Kentucky General Assembly.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Technical Advisory Committee on Physician Services (Title XIX) and recommends the report be accepted with the exception of the paragraph on Page 31.3 relating to primary care centers. The Reference Committee members feel the Kentucky Medical Association should have more information regarding the formation and operation of these centers before approval of these centers can be recommended. The Reference Committee recommends that the Board of Trustees either appoint an ad hoc committee to work with the Kentucky Medical Assistance Program or that the Board of Trustees itself work with the Program in setting up the guidelines for the formation and operation of the primary care centers.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the Advisory Committee to Selective Service

The purpose of this quasi-governmental Committee is to maintain as much as possible an appropriate bal-

ance and distribution of medical personnel between our civilian population and the Armed Forces.

With the absence of a draft for physicians, dentists or allied specialists, it was unnecessary for the Committee to meet during this Associational year.

The Committee members and Colonel Taylor Davidson and his staff with the State Selective Service office have been most helpful and cooperative.

Russell H. Davis, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Advisory Committee to Selective Service and recommends that the report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee on Public Relations

The Committee on Public Relations met twice during this Associational year. However, during the interim periods between meetings we have been involved in projects which were given to the Committee by either the Executive Committee or the Board of Trustees.

At the present time the activities of the KMA Committee on Public Relations center to a great extent on attempting to be of assistance in solving some of the problems that face us today in the field of malpractice insurance. At the request of the Board of Trustees the Committee has asked a Louisville-based public relations firm to provide to us a proposal concerning the possibility of conducting a wide-ranging, indepth public relations campaign throughout Kentucky that would provide information to the general public regarding the many problems and potential problems that will be faced by the consumer if we do not have relief in the field of malpractice premium costs.

This campaign would encompass television, radio, newspaper and magazine; such items as bumper stickers, possibly, general mailings and any other means available to us to communicate our story to the public. Due to the deadline for this report, it has not been possible for me, as Chairman of the Committee on Public Relations, to report personally to the Board on the activities of the Committee at this date. However, we certainly feel that the work of the Public Relations Committee, particularly in the field of endeavor mentioned above, should be continued and strengthened as time, money, staff and physician support will allow this to happen.

The Committee on Public Relations was entailed with the responsibility of helping to coordinate the sponsorship by KMA of three seminars for office assistants during this Associational year. The seminars were held in Louisville, Lexington and Covington, and more than 400 office assistants attended these seminars. This was the second year KMA has sponsored such seminars and we definitely feel they should be continued in the future.

The Practice Management Workshop, which was held at KMA Headquarters in April of this year, was also a responsibility of the Committee on Public Relations. For the second straight year we got outstanding response from those in attendance at this workshop and we certainly believe that this is a program that should be continued in the years ahead.

These are just a few of the highlights of this past Associational year concerning the work of the Public Relations Committee. As Chairman, I want to take this opportunity to thank members of the Committee who have served very diligently and to urge each and every member of the Kentucky Medical Association to actively participate whenever possible in the very important public relations programs of the Association.

Fred C. Rainey, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Public Relations noting the activities of the Committee in regard to public relations concerning professional liability insurance.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the President

Section Dealing with Medicare and Medicaid Only

Let us now turn to another matter with which we must deal forcefully. This is the statutory deceit in the Medicare administration as it pertains to physicians. As predicted, the law has produced an unweilding bureaucracy that has been insensitive to patient needs, the quality of care, and to physician concerns. There has been much budgetary attention and cost accounting that little else has seemed to have been considered. There is general inaccessibility to the bureaucracy in Lexington. Inequities under the system were imposed some of which were questionable regulations as far as can be ascertained. To deal with a problem you are referred to some clerk at a desk generally unaware, who frequently cannot find the folder, and who usually proclaims subsequently that, "Well, it is within the guidelines, regulations, or it is at the directions of the Secretary of HEW." No one can conduct a successful enterprise in this fashion and certainly it cannot be done in terms of quality health care or respectable health care, or human courtesy or decency.

It is proposed that a special committee with directions to meet frequently as possible be appointed until there is a direct channel of communications between the doctors' offices and responsible Medicare authorities at the state level so that there is proper satisfaction and attention given to the problems as they occur. It is further recommended that communications that are done by physicians at whatever extent have a copy filed with this committee and that each complaint directed to the bureaucracy in Lexington be funnelled to this committee so it can have immediate information when necessary to negotiate with

the Medicare office as well as having substantial evidence of the concerns that are growing by the day in the state.

Medicaid is another unsatisfactory program at this time. It has been overpromised and under-financed. Physicians, early in the concept of this program over a decade ago, went along with the proposition of minimal dollars returned to them in order to support the program. At the same time, all other participants were at least allowed to achieve break-even measures for cost or to make slight profits. Many physicians, who are the noble and unsung heroes of this program, have labored in Appalachia and in rural Kentucky and a few even in the ghettos in our state have been the main sustainers of this program. Today, however, there are large numbers of doctors who have become disenchanted and do not participate. This has imposed an even greater burden on those who do despite all contrary vocalizations. There is still not adequate funding from our state budgetary to make it at least a break-even proposition for doctors, but by our services we continue to underwrite the program. Recent projections have been made and solutions have been proposed by the last two administrations to ease this burden. Every opportunity should be extended at this time to help achieve in a reasonable period to arrive at the Usual and Customary fee. If this last opportunity does not bear fruit within reasonable expectancy, it is believed we should then represent to each individual doctor the plausibility and the actuality of his continuing participation in the Medicaid program and no longer pursue a course of futility with our sanction.

This was promised to be a paid-for program, therefore, it should be that. If it cannot be paid for from tax-payers money and if the tax-payer burden is too great or the priorities are assigned in other directions, then the electorate should be so informed.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the President beginning with the last paragraph on Page 1.7 to the paragraph starting with "The State Legislature . . ." on Page 1.9, pertaining to Medicare and Medicaid, and recommends this section of the Presidents' report be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the Chairman, Board of Trustees

Section Dealing with the Report of the Ad Hoc Committee for Foreign Medical Graduates Only

Reasons for the Establishment of the Committee

President Rainey's 1974 Report to the KMA House of Delegates suggested "An ad hoc committee to study the situation in Kentucky relative to the overall situation of foreign medical graduates and report back to the Board of Trustees and/or the House of Delegates." Doctor Rainey's report noted staffing of State mental hospitals by foreign medical graduates, some without licenses to practice medicine in Kentucky; increasing use of FMGs in comprehensive mental health centers, the language barrier between FMGs and their patients, the increasing percentage of FMGs taking the medical licensure exam in Kentucky, the high failure rate of the FMGs on these exams and raised the final question as to whether FMGs working in hospitals were properly supervised.

The Phenomenon of the FMG in the United States

The Committee studied various reports from the American Medical Association, the Association of American Medical Colleges, the National Board of Medical Examiners and the Coordinating Committee on Medical Education. In summary, these reports note the following:

1. There is an overall increase of FMGs in the United States. There are now almost 70,000 foreign doctors in the United States representing 20 percent of all physicians. In 1973, of all the newly licensed doctors in the United States, 44.5 percent were foreign medical graduates.

2. FMGs come from 112 different countries and over 800 foreign medical schools. Since the change in United States immigration laws in 1965, there has been a shift from physicians from European countries to those from Asian countries.

3. The performance of FMGs varies widely. This is exemplified by the fact that 6 of the 17 physicians who received Nobel prizes for medical research in this country were FMGs in contrast to more than 10,000 FMGs who are working without licenses, many having failed repeatedly to pass the licensure examination. It has been documented that the FMGs do less well on the FLEX examination and on the specialty board exams, so that there is increasing concern about whether or not those who are poorly trained are giving a poor quality of medical care.

4. Distribution of FMGs indicates that their distribution geographically and by specialties is much the same as United States medical graduates. However, there does seem to be a higher number of FMGs in State hospital work and in academic medicine.

The recurring theme in most of the reports questions whether or not all this is creating a double standard of medical care.

Status of FMGs in Kentucky

The Kentucky Board of Medical Licensure supplied the following information about foreign medical graduates in Kentucky. There are 3,700 licensed physicians in Kentucky, which includes 398 foreign medical graduates, or approximately 10 percent. Two hundred and ninety six (296) have full licenses, which means there are no limitations, and they may practice as can any other licensed physician in Kentucky. One hundred and two (102) hold limited licenses, which means that they are limited to practice in certain institutions or clinics and are supervised by fully licensed physicians. The Board of Medical Licensure does not check on the degree of supervision.

Of 469 physicians licensed in Kentucky in 1974, 151 were foreign medical graduates (or 32 percent).

There are 110 FMGs in private practice, 91 in cities

and 19 in rural areas; 65 in western Kentucky and 45 in eastern Kentucky.

Records indicate FMGs at the two medical schools are distributed as follows: University of Kentucky, a total of 38 with 23 on the faculty and 15 residents. At the University of Louisville there were 63 FMGs with 15 on the faculty and 48 residents.

State and Federal hospitals employed 44 FMGs whereas private hospitals and clinics employed 128.

Summary

The Committee noted the continuing study by the American Medical Association and the Association of American Medical Colleges, as well as various Congressional committees. It is apparent that Kentucky shares some of the same problems as elsewhere although perhaps to a lesser degree since there are fewer foreign medical graduates in Kentucky.

The Committee concurred in the reported efforts by the Kentucky Board of Medical Licensure to give a more comprehensive examination in the English language and to change the regulations so that foreign medical graduates must meet the same requirements as United States medical graduates. Once this is accomplished, no further limited licenses will be granted.

The Committee is aware that this does not solve all the problems and points to the continuing need for study at the national level, (1) for better methods of selecting applicants for residency training, (2) training of FMGs only in approved residences, (3) the tightening of licensure loopholes.

Frank M. Gaines, Jr., M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Chairman, Board of Trustees, pages 5.10 through 5.13, pertaining to the Ad Hoc Committee on Foreign Medical Graduates.

The Reference Committee, in accepting this portion of the Report of the Chairman of the Board of Trustees, would like to see the following recommendation presented to the Kentucky State Board of Medical Licensure: "A foreign medical graduate holding a limited license to practice medicine should be required to take the examination for a medical license within 12 months after moving to Kentucky; if he fails to pass the examination, he should have one more opportunity to take the examination within the next 12 months. After that period, the foreign medical graduate should no longer be allowed to hold a limited license in the State of Kentucky."

Mr. Speaker, I move the adoption and implementation of this section of the report.

At this point, the Speaker recognized the Chairman of the Board. Doctor Parks read the following recommendation of the Board of Trustees: "It is the feeling of the Board of Trustees that this issue is dealing with a practice that no longer exists in Kentucky, and therefore is not pertinent to our present problem. Therefore, it is recommended that lines 8 through 16 on page 4 of the report of Reference Committee No. 5 be deleted. Line 17 would then be changed to read, Mr. Speaker, I move to accept this section of the report."

A motion was made, seconded and carried that the House accept the above recommendation of the Board.

(Note: Those lines to be deleted consist of the entire second paragraph following the heading, "Recommendations, Reference Committee No. 5." The passage begins, "The Reference Committee, in accepting this portion . . ." and ends with, ". . . should no longer be allowed to hold a limited license in the State of Kentucky.")

Report of the Chairman, Board of Trustees

Section Dealing with the Report of the Ad Hoc Committee on Mental Health-Mental Retardation Only

Purpose of Committee

The Ad Hoc Committee on Mental Health-Mental Retardation has operated for three years. It was created originally to observe the mental health centers scattered over the State and was directed to report annually to the Board of Trustees on any practices of these centers which might conflict with established medical standards. These centers were relatively new in 1971, and varied questions arose. They were expected to deliver a variety of psychiatric services, and physicians in practice were concerned about the ultimate extent of these Government programs, methods of treatment, quality of care, training of professionals, and the compatibility of these institutions and the private sector of medicine. Our report last year dealt mainly with the quality question and whether the goals are reasonable and economic.

This 1975 annual report is the result of three meetings during the past Associational year and on-site visits of members of the Committee to a number of the centers. We were received quite warmly and given much statistical data, especially by the River Region and the Cumberland River Comprehensive Care Centers.

Present Status of the Centers in Kentucky

When these centers were launched a decade ago, they were meant to convey a limited number of mental health services. It soon became apparent that psychiatric patients require a wide range of social supports. It is a rare individual who can recover from an emotional illness on only his efforts and his therapist's. Usually treatment requires the participation and/or cooperation of relatives, a modification of his environment, additional education, group support, rehabilitation, welfare referral, attention to the family since emotional illnesses by their nature involve others, etc. Consequently, additional services were offered, and mental health centers became comprehensive centers. Philosophically this meant a

change from the medical model to a social-psychiatric one.

In a decade these centers have advanced from blueprints to bricks and mortar institutions. They have been highly publicized and have established programs offering patients care in neighborhood clinics, crisis clinics, hospitals, day clinics, partial hospitals, drug clinics, etc. Other available services are consultation to individuals and institutions, workshops and rehabilitative services, educational facilities for the retarded or emotionally ill, treatment for court cases and a nascent research effort. Except for the alcohol and drug addiction programs, individual treatment by a psychiatrist is a miniscule part of the plan because of the numbers of clients involved. A group approach is generally utilized with social workers, psychologists, and other mental health workers directing the counselling. The services offered reflect the peculiar needs of the cachment area, and all conventional modes of treatment are used. These centers are offering many services which, in the past, were rendered by separate public agencies.

The funding of these centers has changed from year to year. Initially funded by the Federal Government, increasing support has come from State and local sources. Using the Cumberland River Comprehensive Care Center as an example, the operational budget for 1974-75 shows the following sources: Federal, 48%; third-party payors, 32%; Medicaid, 12%; State, 4%; and local, 3%. By comparison, River Region lists its revenue sources for 1975-76 as being, approximately: State, 36%; Title XX, 24%; Federal grants, 15%; fees, 19%; and special, 6%. Increased costs and growth in the River Region group is indicated by a budget of $2.9 million in 1971 and $7.7 million in 1972. The North Central Comprehensive Care Center in Elizabethtown had a budget of $3.3 million for 1974.

A review of patient contact statistics for River Region in 1974 further indicates the extent of its operations. There were 331,723 individual direct visits to component centers. New clients seen in 1974 numbered 12,973. Admissions to River Region Hospital for a six-month period numbered 1,199 reaching a total number of patient days of 87,303. Information, consultative and educational services totalled 101,117. To review the past five years as to the number of services rendered gives an index as to overall growth. For 1970, there were approximately 50,000 services; 1971—140,000; 1972—240,000; 1973—275,000; 1974—over 400,000 total services. Most of these patients are adults who are seen for either alcohol or marital problems primarily.

From all this statistical data indicating a rapid and enormous increase in clients treated, as well as variability in services rendered, the conclusion is inescapable that comprehensive health centers are permanent institutions to which the Government is heavily committed for the foreseeable future. Despite the shortcomings of these centers, the physicians to whom we spoke recognize that these centers are treating individuals who otherwise have no resources for treatment. In the total population served by River Region, 70% of the clients had annual incomes below $5,000, 27% made $5,000 to $12,000, and only 2% exceeded $12,000. The Department for Human Resources gives corroborative figures for **all** centers as 68% of these clients having incomes below $5,000.

The Relationship of Comprehensive Care Centers to the Medical Community

As noted in previous reports by this Committee, there has not been a close cooperation between the mental health centers and the private sector of medicine. The centers placed heavy reliance on non-physicians, and the medical profession looked upon this with askance, questioning whether center workers possessed sufficient training to render proper psychiatric care. These center workers were not accustomed to working with doctors and did not (and do not) correspond promptly to inform the physician of the treatment plan. From the standpoint of the workers in these centers, the feeling was that a trained psychiatrist was not needed for a vast number of problems encountered in everyday life. They felt their use of professionals from varied backgrounds could give them a flexibility which offered the client an improved chance to benefit from therapy, and, since the centers were treating mostly indigent cases, they felt that private physicians, especially psychiatrists, were overly concerned that their endeavors were of any threat to the private practice of medicine.

In the past, private psychiatrists had contact with indigent patients in their capacity as consultants in various social agencies, as well as teaching in medical school affiliated hospitals and State hospitals. Now they have such contact rarely, if at all. In recent years State and Federal programs have paid for the medical care of these deprived individuals. Because of the cost of ongoing psychiatric treatment most of these people go to non-psychiatrist counsellors or to the regional mental health centers for social and psychiatric needs.

As to the national picture, there has been a delay in the development of mental health centers. It was anticipated there would be 1,000 centers by 1980. The present number is approximately 480, and no new centers have been built in the past two years. Main reasons for this is the economic recession with a reduction in the budget for social services and less demand for the centers after the most needful communities had built centers. One would presume the delay indicates some soul-searching as well that the comprehensive center approach is the best possible solution. Despite all doubts, the billions of dollars invested denotes a major commitment by the Government.

Relationship of Comprehensive Care Centers to Private Psychiatrists

In view of the entrenchment of the comprehensive mental health centers and their efforts to deal with the numerous emotional problems of particularly the deprived segment of the population, this Committee feels that the time is ripe for an effort at greater cooperation between the psychiatrists in pri-

vate practice and workers in the comprehensive mental health centers. The staffs of the centers are under the intense pressure to render assistance to people in real need. It is our collective opinion that the psychiatrists could be of immense value in consultative work and in training and assisting these professionals in the centers in many ways. The centers have previously extended invitations to the private physicians to render such assistance. To the private physician this would be an opportunity to witness and participate in methods of health care delivery which are evolving. The team approach is being used increasingly by all segments of medicine, and psychiatry is no exception. One might expect the private psychiatrist to benefit by becoming acquainted with the team approaches which are being developed in the centers. Furthermore, it would enable the private psychiatrists to reestablish contact with the indigent of the community through the workers in the centers and thereby help them.

Summary and Recommendations

The mental health centers are well established. They are located in every region of the State and are responsible for mental and social care which heretofore was under the auspices of many different agencies. The evolution of these centers in their delivery of services has advanced the question of **method of approach** to the question of **quality.** This seems to be an ideal time for a cooperative effort between private psychiatrists and professionals of these centers to improve the quality of care as discussed in detail in our report of last year. In this way the emphasis will be on serving all the people of the Commonwealth.

Ultimately, each psychiatrist in private practice will have the option of working in association with the centers or remaining apart. This Committee believes such benefit would be derived to all concerned by a liaison between the centers' professionals and the psychiatrists in practice. Furthermore, we suggest that by expanding this Committee with several professionals chosen from the various centers and several psychiatrists to join the physicians on this Committee, we could implement such a cooperative effort. For this reason, we recommend this Committee be continued, either in a standing or ad hoc status.

Homer B. Martin, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the portion of the Report of the Chairman, Board of Trustees, dealing with the Report of the Ad Hoc Committee on Mental Health-Mental Retardation. The Reference Committee recommends that this report not be accepted.

The Reference Committee recognizes the amount of work Homer B. Martin, M.D., Chairman, and the members of his Ad Hoc Committee on Mental Health-Mental Retardation, have put into this report, but after lengthy discussion at the Reference Committee meeting, including testimony by Doctor Martin, the members feel that the consensus of those present was that there is serious doubt about the quality of the care being provided by the mental health-mental retardation centers and about the expenditure of such large sums of money with apparently little results.

The Reference Committee suggests that this ad hoc committee continue to function to try to resolve the issues raised at the Reference Committee meeting.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The Chairman of the Board was again recognized to convey the feeling of the Board of Trustees regarding the report of the Ad Hoc Committee on Mental Health-Mental Retardation, and consequently, the House voted to accept the following Substitute Resolution which had been drafted by the Board:

"WHEREAS, the Kentucky Medical Association is concerned about possible adverse cost and quality of care considerations in the state mental health-mental retardation centers, be it

RESOLVED, that the Board of Trustees encourage the assistance of government auditors (GAO) for the evaluation of the component of the cost of care in the mental health-mental retardation centers, and be it further

RESOLVED, that the KMA call on its members who are in the private practice of psychiatry to work with the Bureau for Health Services of the Department for Human Resources to assist in evaluating and hopefully upgrading where appropriate the quality of care and work to establish effective linkages with the practicing medical profession.

Resolution B

KMA Board of Trustees

WHEREAS, the increasing problem surrounding "malpractice" required that physicians must pay spiraling premiums for professional liability insurance, if obtainable, thus increasing medical cost, and

WHEREAS, a definite need for more primary care physicians has been identified particularly for the rural and underserved areas, and

WHEREAS, reduced reimbursement levels allowed by the Medical Assistance Program and economic restrictions put on medical practice by rising costs particularly associated with the malpractice problem, have greatly hampered efforts to secure and maintain a sufficient number of physicians especially in rural areas of the state, now therefore be it

RESOLVED, that the KMA request the Governor and the state's legislators to allocate appropriate money for physicians' services in the Medical Assistance Program during the 1976 Session of the Kentucky General Assembly, to bring them to an equitable level to insure the maintenance of an adequate number of physicians and to offset the factors of non-competitive reimbursement levels in the poor and underserved areas and to prevent further depletion of medical availability.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution B, Medicaid Funding, introduced by the KMA Board of Trustees, and recommends it be approved.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution K

Jefferson County Medical Society

WHEREAS, the payment system under Medicare, Part B, is so inadequate, confusing and contradictory, that there are thousands of eligible people in the Commonwealth who are caused financial suffering, and

WHEREAS, the law clearly is intended to treat all patients over 65 the same and provide benefits from physicians under the usual, customary and reasonable concept, and

WHEREAS, the contradictions in Medicare Title XVIII, together with the 1971 freeze and the 1973 prevailing regulations, results in a loss of thousands of dollars to eligible patients who pay their doctor a UCR fee, and then fail to obtain adequate reimbursement, and

WHEREAS, unfair area designations, together with a review process which is administrator-controlled has resulted in further misunderstanding and patient confusion, therefore be it

RESOLVED, that KMA communicate our dissatisfaction with Medicare to the AMA asking that they, in turn, contact the Secretary of HEW, the Director of SSA Bureau of Health Insurance, and the U.S. Congress to ask that Medicare patients be assisted by resolving the following contradictions and problem areas:

(1) Patients should be correctly informed that reimbursement is for *much less* than what is usual, customary and reasonable in a community, rather than being told they are paid "80% of the reasonable charge".

(2) Patients are incorrectly told by Government printing on the back of every check "the patient is responsible only for the applicable deductible and co-insurance and for non-covered service". This is untrue since the patient of a doctor who does not accept assignment is responsible for the full balance of the doctors UCR fee.

(3) Reasonable charges are determined by a complicated system that should be much more current. The regulations plus administrative complications first make the system beyond understanding by all patients and many physicians. Second, the base calendar period of 1971 and the prevailing fees for fiscal year 1973 should be brought up to date. Also, it is unfair for the regulations to demand that payment is based on the lowest of several different calculations rather than usual, customary and reasonable.

(4) In the beginning; Medicare Administrators were permitted and often requested a discussion of fees, utilization or mode of treatment by a review committee of the county medical society. This was almost completely discontinued and replaced by only two levels with the Administrator. First an "informal review" by a paid medical advisor or consultation with professional relations. If this was unsatisfactory, then only a "fair hearing" is permitted, which becomes a semi-legal procedure requiring legal counsel. We commend the current Medicare Administrator in Kentucky for showing recent improvement and permitting physician review.

(5) The designation of different areas within a given medical community for the purpose of different fee schedules, cannot be properly administered for the benefit of all patients.

(6) The patients of new or young physicians are severely penalized since they may be reimbursed only at the 50th percentile of an already low established prevailing level for one year.

be it further

RESOLVED, that the KMA Board of Trustees be asked to communicate also with the Secretary of HEW, the Director of SSA Bureau of Health Insurance, and the U.S. Congress asking for the resolution of the above problems for patients, and be it further

RESOLVED, that KMA compliment the current Administrator of Medicare in Kentucky for his efforts at improvement in communications with physicians and patients. At the same time, KMA should earnestly solicit the assistance of the Medicare Administrator to communicate these deficiencies at the national level for improvement.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution K, Dissatisfaction with Part B of the Medicare Program, introduced by the Jefferson County Medical Society, and recommends it be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution L

Jefferson County Medical Society

WHEREAS, the Department of Human Resources and the Bureau for Social Insurance in Kentucky frequently reveals to the public press the many great benefits that are provided in Kentucky for the poor, the near poor and the medically indigent through the KMAP Department, and

WHEREAS, since it's inception, the doctors of medicine in the Commonwealth of Kentucky have continually subsidized the KMAP by accepting reduced fees, and

WHEREAS, the people of the Commonwealth of Kentucky do not fully realize the extent of the charitable contributions that physicians in Kentucky are making to KMAP, and

WHEREAS, in some instances, new programs for payment of a non-physician type service have been instituted by the Department of Human Resources and money is allocated for new service while physicians continue to greatly subsidize the program through reduced fees, therefore be it

RESOLVED, the House of Delegates instructs the KMA Board of Trustees and all KMA Officers to

become completely informed on the amount of money, and time involved in this subsidy so that all members of the written and electronic media may become accurately informed. We, hereby, ask that the KMA Board of Trustees determine, as accurately as possible, in cooperation with the KMAP Bureau for Social Insurance, the total value of services contributed by the physicians in Kentucky in behalf of the people in the Commonwealth.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution K, Public Knowledge of Physician's Contribution to the Kentucky Medical Assistance Program (KMAP), introduced by the Jefferson County Medical Society, and recommends it be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution T

Fayette County Medical Society

WHEREAS, the regulation imposes a requirement over which the nursing home has no control; and

WHEREAS, the regulation in essence imposes an obligation upon the medical profession without the consent of or consultation with the medical profession; and

WHEREAS, those nursing homes not able to comply with the regulation could be required to close their doors; therefore be it

RESOLVED, that this regulation be vigorously opposed by the Kentucky Medical Association.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution T, Opposition to Federal Regulation Requiring All Skilled Nursing Facilities to have a Medical Director, introduced by the Fayette County Medical Society. The Reference Committee recommends that this resolution not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded from the floor.

Doctor Parks was recognized and stated the action the Board had taken on this section of the Reference Committee report was to reiterate its policy stand on the subject, and thus offered the original Resolution T as a Substitute Resolution and recommended it be accepted.

A substitute motion was then heard and seconded that Resolution T be accepted as the Substitute Resolution and implemented. On a call for the vote, the motion passed 72 to 45.

Resolution Z

Henderson County Medical Society

WHEREAS, KMAP has notoriously been unfair to the physicians of this state since its inception, and

WHEREAS, KMAP pays more for nurses' services (i.e., KMAP screening programs pay $12.00 per exam by RN's versus $7.00 per office visit by private physicians) than for services of private physicians, and

WHEREAS, KMAP pays more for physicians' services rendered in quasi-governmental agencies (i.e., KMAP pays $16.00 per visit to drug clinics of local mental health units as opposed to $7.00 per visit in private physicians' offices) than in physicians' private offices, and

WHEREAS, KMAP is now requiring all private physicians in the Commonwealth of Kentucky to resubmit each hospitalization bill, indicating each daily visit on a separate line on a special KMAP form retroactive to January 1, 1975, requiring yet another voluminous increase in paper work by a single stroke of their pen, and

WHEREAS, the State Computer which can read only one line at a time appears to be incapable of processing bills presented by private physicians, and

WHEREAS, the local offices of Public Assistance continue to issue "pink slips" to recipients for physicians' services beginning on the date of issue, knowing that the information will not be available to the computers in Frankfort for at least four months after issue, and

WHEREAS, KMAP is allegedly a model program for all states to attempt to duplicate, be it therefore

RESOLVED, that the private physicians of this state, en masse, refuse to accept further patients under this program until the multiplicity of problems is corrected in Frankfort.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution Z, Kentucky Medical Assistance Program, introduced by the Henderson County Medical Society. The Reference Committee recommends that this resolution not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 5 as a whole, as amended.

The motion was seconded and carried.

Mr. Speaker, I would like to thank each member of this Committee for his help in reviewing these reports and writing the Reference Committee report and Mrs. Doris Crume for her assistance in preparing this report.

REFERENCE COMMITTEE NO. 5

Danny M. Clark, M.D., Somerset, Chairman
W. E. Becknell, M.D., Manchester
Frank B. Radmacher, M.D., Louisville
Forest F. Shely, M.D., Campbellsville
Robert E. Smith, M.D., Covington

REFERENCE COMMITTEE NO. 6

David L. Stewart, M.D., Louisville, Chairman

Reference Committee No. 6 considered the following reports and resolutions:

11. Report of the Judicial Council
12. Report of the Rural Kentucky Medical Scholarship Fund
26. Report of the KMA-KNA Joint Practice Committee
43. Report of the Committee to Study the Constitution and Bylaws
44. Report of the McDowell House Board of Managers
46. Report of the Ad Hoc Committee to Study The External Structure of KMA

Resolution F—Method of Selecting Nominating Committee (McCracken County Medical Society)

Resolution G—Proposed Changes in the Nurse Practice Act (McCracken County Medical Society)

Resolution J—Specialty Representation in the KMA House of Delegates (Hardin-Larue County Medical Society)

Resolution V—Current KMA Policies Concerning Abortion and Euthanasia (Campbell-Kenton County Medical Society)

Report of the Judicial Council

During this past year since our last report, the Judicial Council has met on the following dates: November 6, 1974; January 15, 1975; March 12, 1975; May 21, 1975, and July 16, 1975. Its considerations have covered a broad scope of activities involving physicians, patients, hospitals, insurance carriers and commercial and governmental agencies. Some 80 agenda items were considered and were either resolved, passed on to an appropriate body or are under continuing investigation by the Council. Particular emphasis was placed on attempting to resolve matters before the Council on a timely basis.

The major topics of general interest to the membership which were considered by the Council will be set forth herein:

In many of the cases brought before this Council it is obvious that the patient's, or his family's, complaint regarding his medical care has been precipitated by remarks made by his second physician. Hasty ill-advised statements and unwarranted criticisms are made without firsthand knowledge of the conditions under which previous treatment was rendered. It is the opinion of the Council that medical "second guessing" with all the advantages of hindsight is uncalled for and harmful to the profession. In any instance where one physician justifiably feels that another is not rendering adequate care, he should attempt to discuss this with the subject physician and, if necessary, he should communicate with the appropriate medical authorities.

Of continuing concern to the Council and to the Association has been the subject of Health Maintenance Organization advertising. The Council learned that federal regulations for HMO's had been developed which would be implemented by state government. The Kentucky Department of Insurance would ultimately be involved in this process and the Council is presently seeking to determine what input the Insurance Department intends to have with regard to monitoring and enforcement of HMO advertising.

A question was received concerning the obligation of a physician to testify as an expert witness, and in reviewing the matter the Council determined that the legal question involved has not been specifically decided by the courts of Kentucky, but present satutory and case law indications are that a physician cannot refuse to give expert testimony when properly called as a witness.

A number of incidents relating to abortion were considered by the Council, all of which were reviewed in light of the guidelines adopted by the 1973 session of the House of Delegates. As a result of the 1973 House actions, the Council coordinated the observation of "abortion clinics". These observations were conducted in cooperation with county medical societies and all facilities were investigated for the enforcement of these guidelines. One physician, not following all of these guidelines, has been referred to the Kentucky State Board of Medical Licensure.

Numerous instances of solicitation of patients by mail were considered by the Council, and it seems appropriate to remind the profession, particularly those recently entering the profession, of the long-standing prohibition of solicitation of patients in any form.

Several reports were received concerning various mobile screening units and, in relation to one specific report, the Council declared that mobile screening units presented no ethical problems so long as there is adequate medical supervision of the testing and the customary ethical prohibitions of solicitations of patients are observed.

The Council reaffirmed its position concerning establishment of a physician's office in a hospital. An earlier decision held that it would be unethical for a physician to have an office in a hospital unless all physicians in the community were afforded the same opportunity.

In response to an inquiry from a commercial firm concerning interest charges on statements for medical services that are in arrears, the Council adopted the position of the AMA Judicial Council as follows:

"Since the practice of medicine is a profession and not a business, the practices adopted by businesses are not necessarily suitable to medicine. It is not in the best interest of the public or the profession to charge interest on an unpaid bill or note for professional services not paid within a prescribed period of time nor is it proper to charge a patient a flat collection fee if it becomes necessary to refer the account to an agency for collection.

It is not improper for a physician to add a service charge, equal to the actual administrative cost of rebilling, on accounts not paid within a reasonable time. Patient must be notified in advance of the existence of this practice."

The Council considered the problem and responsibilities of one physician covering calls for another absent physician. It was determined that the covering doctor must see all of the patients requiring attention just as if they were his own patients. In the event that the covering doctor does not want to see a certain individual patient or if that individual patient does not want to see the covering doctor, then a decision must be made which will insure good ethical medical care under the particular circumstances. If it is an emergency situation, obviously the covering doctor should render treatment of the patient. If it is not an emergency situation and the covering doctor does not wish, for some personal reason, to treat the patient, he must nevertheless see to it that he fulfills his responsibility to the doctor for whom he is covering and his patient, or that someone else is available to fulfill that responsibility. If it is the patient who elects not to be treated by the covering doctor and there is no emergency situation, then the covering doctor should let that patient make other arrangements.

An inquiry was received from a relative of a patient who alleged that unnecessary medication was being given to the patient by a physician. Upon investigation, it was determined that the situation merited being referred to the Board of Medical Licensure for an investigation of the attending physician's drug prescribing patterns.

As a result of an expanded complaint processing procedure, the Council has witnessed increased activity and we would like to express our great appreciation to the District Trustees who have been of invaluable assistance in helping us to obtain information. A good many of our efforts would have been to no avail had it not been for their fine assistance.

I assumed duties as Chairman at our January meeting, succeeding E. C. Seeley, M.D. On behalf of the Association, I would like to express my appreciation and deep personal regards to Doctor Seeley for his efforts as Chairman and also to each of the other Council members and to Legal Counsel who are: J. Campbell Cantrill, M.D., S. Randolph Scheen, M.D., Samuel D. Weakley, M.D. and Carl L. Wedekind, Jr.

James O. Willoughby, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 considered the Report of the KMA Judicial Council. This report was considered with care by the Committee, and the numerous meeting of the Judicial Council were noted with approval. A KMA member present spoke against a principle of the AMA Judicial Council as quoted in the second paragraph on page 11.3. He feels that the principle of adding a service charge for billing expenses to overdue accounts is of questionable propriety. No action on this is suggested.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Rural Kentucky Medical Scholarship Fund

The Rural Kentucky Medical Scholarship Fund, established in 1946 for the purpose of providing a better distribution of physicians in rural Kentucky, now has 196 physicians in practice in 87 counties with 19 practicing in critical areas and two in the Public Health Service.

This year the Board of Trustees of the Fund approved 34 loans amounting to $119,000 for medical students for the current year. Fifteen loans were granted to first-loan applicants, and there were 19 renewals. During the past 12 months, 14 physicians' loans have been forgiven for practice in critical rural areas in Kentucky for a total of $33,000.

Loans up to $3,500 per year are available to medical students who are residents of Kentucky and who agree to practice in an approved area of the State one year for each loan received. Forgiveness features are applicable to recipients who establish practice in designated critical counties or who serve in the Kentucky Public Health Service.

In addition to loans to students, the Fund has an Establish Practice Loan of $5,000 to physicians entering practice for the first time in an approved rural area of Kentucky. The loan bears an interest rate of two percent and permits practice in over 100 counties in Kentucky. Annual forgiveness features of $1,000 apply to areas considered in greatest need of a physician.

The members of the Board of Trustees of the Fund, in commenting on the outcome of this year's meeting, expressed particular appreciation for the interest and support of Governor Julian M. Carroll, Commissioner William P. McElwain, M.D., and the members of the Kentucky General Assembly.

G. L. Simpson, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next reviewed the Report of the Rural Kentucky Medical Scholarship Fund. The Chairman of the Fund, Doctor G. L. Simpson, presented elucidation of the report, and the Reference Committee was impressed by the great influence for good which this Fund has had on medical practice in rural areas of our State. We note that there are 34 medical students now using loans from the Fund and that, over the years, 300 physicians have been assisted in their studies and practices by the Fund, yielding an impressive influence in those areas of greatest need. While the Fund is not a part of the KMA official structure, we take pride in its accomplishments and warmly commend those KMA members who serve the Fund.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the KMA-KNA Joint Practice Committee

The KMA-KNA Joint Practice Committee held one meeting this year and has a second meeting scheduled for August.

As the Committee is still very new, some time was spent by the Committee in reviewing our statement of purpose. As these are somewhat different than those presented to the House last year, we are outlining them again. The duties as seen by the Committee are as follows:

1. Examination of roles and functions in medicine and nursing practice with definition of new and altered patterns.
   a. Identify responsibility that nursing and medicine are willing to assume in fulfillment of health care needs.
   b. Define authority, responsibility and operation of each profession and examine relationships (clarification-identification of independent and interdependent functions of medicine and nursing).
   c. Define changes in medical and nursing practices and recommend and implement as needed to improve quality of health care.
   d. Define the new areas of responsibility of physicians and nurses and take aggressive leadership roles in existing as well as emerging health care systems.
2. Improve communication between medicine and nursing to enhance joint planning and action.

The Joint Practice Committee discussed the changes proposed by KNA in the Nurse Practice Act in some detail, at the request of the KMA Board. The results of that discussion were submitted to the KMA Board in August and can be found as a part of the Report of the Chairman of the KMA Board of Trustees.

In light of the fact that KMA, last year, adopted Resolution A calling for mandatory continuing medical education of physicians licensed in Kentucky and the fact that the Kentucky Nurses Association has supported previous legislation which require continuing education for nurses, considerable discussion was given over to the possibility of a joint continuing education effort. This was thought to be feasible and it is anticipated that this subject will undergo greater discussion at our August meeting.

The Committee also discussed the feasibility of jointly sponsoring a seminar on combined medical and nursing audits. It was a feeling of those present that the Joint Commission on Accreditation of Hospitals is moving toward joint audits as a condition of accreditation and the Committee felt it might be worthwhile to pursue this in the form of a formal program.

The feeling is shared by those on the Joint Committee that a joint practice committee can certainly be an effective means of coordinating educational efforts between the two professions and as a sounding board for new ideas affecting the practice of medicine and nursing.

I am grateful to the physician members who faithfully attended our meeting this year and to the Kentucky Nurses Association members for their cooperation in the Committee structure.

Robert N. McLeod, M.D., Chairman

Recommendations, Reference Committee No. 6

The next report considered was the Report of the KMA-KNA Joint Practice Committee. A number of members present spoke about this report. It is of a fairly general nature, mentioning several areas for cooperative efforts. Among other things, this Committee had dealt with changes proposed by the KNA in the Nurse Practice Act, resulting in a report to the KMA Board and in KMA House of Delegates Resolution G, which will be dealt with at a later time in this report.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Committee to Study the Constitution and Bylaws

Your Committee to Study the Constitution and Bylaws met this year on April 9 for its annual session to implement Bylaws changes that had been proposed to the Committee and to generally update the Bylaws.

Our format for presentation will be to first present our recommendations and reasons for submitting any proposed changes. Secondly, we will quote the wording of the present section of the Constitution and Bylaws, and thirdly, present the proposed amendments to the Constitution and Bylaws.

Amendments to the Bylaws Recommendation

Last year, the House of Delegates changed the section of the Bylaws pertaining to student membership to allow them to have one voting member in the House of Delegates, which would be a student member of KMA elected by the student body of the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the student body at the University of Louisville School of Medicine. Due to that change, a sentence is in that section of the Bylaws which is no longer necessary.

CHAPTER I, Membership

Present Section 2 (f) Student Members: Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. (Student members shall not have the right to vote nor hold office.) They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from January 1 to December 31 of each year. Student members may not hold office but may be voting members of any committee to which they are appointed. They will be represented in the House of Delegates through one

voting representative, a student member of KMA elected by the student body at the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the student body at the University of Louisville School of Medicine.

Proposed Section 2 (f) Student Members: Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from January 1 to December 31 of each year. Student members may not hold office but may be voting members of any committee to which they are appointed. They will be represented in the House of Delegates through one voting representative, a student member of KMA elected by the student body at the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the student body at the University of Louisville School of Medicine.

Recommendation

This year, three county medical societies called for a special meeting of the KMA House of Delegates. This brought attention to the fact that the present Chapter III, Section 2 of the Bylaws, which deals with calling a special session, was somewhat unclear. Thus, the following recommendations are made which will hopefully clarify the intent of this section of the Bylaws.

CHAPTER III, The House of Delegates

Present Section 2: The House may be called into special session by the President with the approval of the Board of Trustees and a special session shall be called by the President on the written request of Delegates representing fifty or more component societies. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Proposed Section 2: The House may be called into special session by the President with the approval of the Board of Trustees. A special session shall be called by the President on the written request of *fifty duly elected Delegates of the Association.* The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Recommendation

Again, in our efforts to generally upgrade the Bylaws each year we found Section 8 which refers to how resolutions are introduced to the House and by whom they are introduced, to be somewhat vague and feel that our proposed wording will again clarify the intent of this section.

CHAPTER III, The House of Delegates

Present Section 8: Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary following its introduction. If the author be an individual member, it shall be signed by him. If the author be a group of members, it shall be signed by the authorized spokesman for that group. Immediately after the Delegate has introduced the resolution, it shall be referred to the proper Reference Committee before action thereon is taken.

Proposed Section 8: Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary following *its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group.* Immediately after the resolution has been introduced, it shall be referred to the proper Reference Committee before action thereon is taken.

Recommendation

The Committee took note of the fact that certain officers of the Association may not hold those offices until being a member of the Association for a certain period of time. We feel this is an appropriate requirement but note that the Secretary and Treasurer, two of the most important offices of the Association, do not have this requirement. For that reason, we are recommending that anyone nominated for the office of Secretary or Treasurer be a member of the Association for at least three years.

CHAPTER IV, Election of Officers and Delegates to the American Medical Association

Present Section 1: The President-Elect and the Vice-President shall be elected from the State at large for a term of one year, the President-Elect succeeding to the Presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their Alternates shall be elected for terms of two years. The Speaker of the House of Delegates, the Vice-Speaker, the Secretary and the Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary or Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. Terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full

terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice President, Speaker or Vice Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Proposed Section 1: The President-Elect and the Vice President shall be elected from the State at large for a term of one year, the President-Elect succeeding to the Presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their Alternates shall be elected for terms of two years. The Speaker of the House of Delegates, the Vice Speaker, the Secretary and the Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary or Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. Terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice President, *Secretary, Treasurer,* Speaker or Vice Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Recommendation

As KMA has grown over the past few years, the volume of checks which are written through the Headquarters Office has also grown. There have been several times when it has been necessary to have a check drafted and signed immediately. When these occasions arise, and the Secretary or Treasurer or Executive Director have not been immediately available, it creates a considerable problem. For this reason, your Committee is recommending a change in the Bylaws which will make it easier for the Headquarters Office to have checks signed.

CHAPTER V, Duties of Officers Other Than Trustees and Alternates

Present Section 8: The Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Secretary or the Executive Director and shall be countersigned by the Treasurer of the Association. Under unusual circumstances, when one or more of the above-named officials are not readily available, the President or the Chairman of the Board of Trustees is authorized to sign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. All five officials shall be required to give bond in an amount to be determined by the Board of Trustees. The Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

Proposed Section 8: The Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the *Executive Director or his designee* and shall be countersigned by the *Secretary or* Treasurer of the Association. When one or more of the above-named officials are not readily available, *four specifically designated representatives of the Executive Committee are* authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. *The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible, should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers* shall be required to give bond in an amount to be determined by the Board of Trustees. The Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

Robert L. McClendon, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered the Report of the Committee to Study the Constitution and Bylaws. The floor was made available to all who wished to discuss the several proposed changes to the Bylaws. The only point raised refers to the dates mentioned under "proposed Section 2 (f) Student Members", found on page 43.2. Mr. Dan Miller, Student Delegate from the University of Louisville School of Medicine, suggested that the dates specified be reconsidered in light of the scholastic schedules of medical students. Accordingly, the Reference Committee suggests that the words "January 1 to December 31 of each year" be deleted and replaced by *"October 15 to October 14 of the next year."* These dates were suggested by C. Nicholas Kavanaugh,

M.D. as probably the best we could specify. Reference Committee No. 6 recommends the acceptance of this report with the suggested change.

Mr. Speaker, I recommend adoption and implementation of this section of the report.

The motion was seconded and carried.

Report of the McDowell House Board of Managers

The McDowell House Board of Managers has met in the House four times during the past year at quarterly intervals. Some 90% of the members have attended each meeting.

The state of the House is excellent. Much interest and help comes from the Auxiliary of the Association. The premises are well kept, aided by the volunteers and Garden Club of Danville. An herb garden has proved of much interest. The Home has been opened to the public daily, with explanations and lectures given on a personal basis. The Board is pleased with the personnel representing the House and the Association.

The Kentucky Heritage Commission, as a result of an early listing of the House in the National Register of Historic Places, has indicated that this House is eligible for funds for restoration and possibly maintenance on a 50-50 matching basis. The Board will maintain a list of projects for repair and restoration which may be expected in the near and distant future, as a house of this age needs constant repair and care. Surplus funds are expected to be used for these purposes, hopefully on a matching basis with the Kentucky Heritage Commission and the Department of Interior. A major undertaking in the next year will be repainting the exterior of the House with removal of the old paint.

A bound copy of August Schactner's Biography of McDowell has been presented to the library of the American Medical Association.

During the past year many of the public have visited the House, and a surprising number of distinguished physicians have journeyed to Danville from distant places to visit the House and pay homage to Doctor Ephraim McDowell.

The House continues as a symbol and tribute to Doctor McDowell and Kentucky medicine.

Laman A. Gray, M.D., Chairman

Recommendations, Reference Committee No. 6

The next report considered was the Report of the McDowell House Board of Managers. The Chairman of this Board, Doctor Laman A. Gray, was present to enlarge on the report and answer questions. The very real interest of the members of this Board was noted, and the Reference Committee is impressed by their care of this part of our medical heritage. Especially in this time of our Bicentennial Celebration, the McDowell House is a symbol of fine medical traditions.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Report of the Ad Hoc Committee to Study the External Structure of KMA

The 1974 KMA House of Delegates recommended that the Ad Hoc Committee to Study the External Structure of KMA be reappointed with the specific request that it review and encourage the development of multi-county societies. The Committee met on March 10 and discussed in detail possibilities for other multi-county medical societies noting that there seems to be a hesitancy on the part of members to form multi-county societies. It was pointed out that this is probably because they do not understand that a county does not lose any of its delegates but, in fact, could become stronger with an opportunity for better programs. Currently there are three multi-county medical societies in Kentucky—Campbell-Kenton; Shelby-Henry-Oldham; and Pennyrile, composed of Caldwell, Christian, Lyon, Muhlenberg, Todd and Trigg Counties. The Committee members recommended to the Board on April 10, 1975, that each Trustee be requested to formulate ideas for multi-county societies in his area and that consideration also be given to changing Trustee District boundaries where it might aid in the formation of a more effective multi-county society.

The Board approved this recommendation and requested that a letter about this matter be mailed to each Trustee.

The Committee also discussed the possibility of restructuring the KMA Trustee Districts to coincide with the 15 State Government Regions and noted the problem areas in such a redistricting plan. The Committee recommended to the KMA Board of Trustees that no revisions be made in the Trustee Districts until the situation regarding multi-county societies is resolved, at which time this matter can be more realistically reviewed. The Board approved this recommendation.

There was a recommendation by the 1974 House of Delegates that the KMA Board of Trustees needs to immediately outline the three district geographic areas of the State from which the AMA Delegates and Alternate Delegates are selected. The KMA Executive Committee, on October 31, 1974, charged the Ad Hoc Committee to Study the External Structure of KMA with implementing this request.

The Committee discussed many possibilities, taking into consideration the present location of AMA Delegates and Alternates and geographic physician population. Currently KMA has three Delegates and three Alternate Delegates on the basis of one for each 1,000 physicians or fraction thereof. The Committee recommended to the Board that Area 1 consist of Trustee Districts 1, 2, 3, 4, 6, 11, 12, 14 and 15; Area 2 would be Trustee District 5; and Area 3 would include Trustee Districts 7, 8, 9, 10 and 13. This would provide for approximately the same number of physicians in each area in the selection of AMA Delegates and Alternates.

The Board asked the Committee to restudy these recommendations as they did not seem they would be workable from a practical standpoint due to the fact that the State was essentially divided in half and

that any Delegate or Alternate Delegate would be representing too broad an area geographically.

Committee members were contacted again for further suggestions. It was noted that there are many different ways to divide the State, which include physician population, geographically east and west, or north and south, but that any proposal presents problems. The Committee members point out that the present system has presented no real problems in the past, but can foresee difficulties in the future by a single definitive map for KMA Delegates and Alternates to AMA. It will be most difficult to devise a map that will have some significance of permanency or acceptability.

Since the House has previously approved an at-large selection of State Association officers and since no geographic boundaries seem justifiable or acceptable, it is recommended that the House of Delegates elect its Delegates and Alternate Delegates to the AMA at large.

I would like to take this opportunity to thank the members of this Committee for their good work and cooperation.

Wyatt Norvell, M.D., Chairman

Recommendations, Reference Committee No. 6

The Committee next discussed the Report of the Ad Hoc Committee to Study the External Structure of KMA. The Chairman, Doctor Wyatt Norvell, spoke before the Reference Committee and emphasized the advantages of multi-county societies. It is apparent also that other means of area apportionment have been considered and the present definition of areas seems most equitable. The question of electing Delegates to the AMA from the state at large was carefully discussed and that principle is endorsed by this Reference Committee with the suggestion that the following words be added to the end of the first sentence of page 46.3: "with the provision that no more than one Delegate and no more than one Alternate Delegate shall be elected from one Component Society." With this modification, Reference Committee No. 6 recommends the acceptance of this report.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and carried.

Resolution F

McCracken County Medical Society

WHEREAS, the present method of selecting a Nominating Committee for the officers of the Kentucky Medical Association is archaic and outdated, and not a democratic process, and

WHEREAS, a Nominating Committee should have representatives selected by the Board of Trustees, and representatives selected by the House of Delegates, the latter in the majority, therefore be it

RESOLVED, that the Bylaws of KMA be changed so that the Nominating Committee will be selected as follows:

The Nominating Committee of KMA shall consist of seven members elected by the House of Delegates of KMA at each Annual Meeting. Two of the seven members shall be elected from a list of six names submitted by the Board of Trustees, and five of the seven members shall be elected from a list of fifteen names, one name each submitted by each of the fifteen Trustee Districts. The Delegates present at the Annual Meeting from each Trustee District shall caucus in the manner now in effect for selection of nominees for the Trustee, and select a nominee for the Nominating Committee. and be it further,

RESOLVED, that if the House of Delegates does not approve of this method of changing the selection of the Nominating Committee that the matter be referred to the Committee on Bylaws and a report be returned to the House of Delegates next year.

Recommendations, Reference Committee No. 6

The Committee next considered Resolution F—Method of Selecting Nominating Committee, introduced by the McCracken County Medical Society. Doctor Eugene Sloan presented the case for adoption of this resolution. While this suggested method seems to us to be more involved, we can see that it would indeed set up a system less subject to influence of individuals, though we, like Doctor Sloan, do not believe that the current system has ever been abused.

Feeling that the second resolution represented by the last paragraph of this subject is redundant, we recommend that this paragraph be eliminated.

Reference Committee No. 6 recommends the adoption of this resolution, as modified, with the stipulation that it be referred to the Constitution and Bylaws Committee for implementation.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Resolution G

McCracken County Medical Society

WHEREAS, the Kentucky Medical Association recognizes that many changes have occurred in the expanding role of the nurse in recent years, and

WHEREAS, we recognize that in CCU, ER and ICU units many nurses are accepting increasing responsibilities in the delivery of health care, and

WHEREAS, in remote areas nurses are delivering care of great importance to the health care of the people of the Commonwealth of Kentucky, and

WHEREAS, we as physicians appreciate and wish to support nurses in their expanded role, therefore be it

RESOLVED, that the Kentucky Medical Association supports the Kentucky Nurses Association in their efforts to change the Nurse Practice Act—KRS 314 with the following exceptions: 1) that KRS 314.011, Paragraph 3, in the definition of a "Registered Nurse" must continue to include the following terminology—"but shall not be deemed to include acts of medical diagnosis or prescription of therapeutic or corrective measures," and that 2) Section 314.151 which limits the Nursing Board's

authority to interfere with the internal workings of a hospital should not be deleted from the law.

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered Resolution G—Proposed Changes in the Nurse Practice Act, introduced by the McCracken County Medical Society. This resolution was the subject of vigorous discussion by a variety of people including a guest representative of the nursing profession. In general, the proponents of the change in the laws governing nursing in Kentucky seem to wish more independence for the nurse, believing that the Board of Nursing is the proper agency to define their role in diagnosis and treatment. Most physicians testifying felt the present wording of the section referred to in the resolution offers the most workable definition of the nurses' role. In reflecting on all of the elements involved, the Committee felt that the four paragraphs which begin with "WHEREAS" are redundant and suggest their elimination. As here modified, the Committee supports the acceptance of this resolution.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded from the floor.

An amendment to the motion was made and duly seconded that this matter be referred to the KMA Board of Trustees. The motion passed as amended.

Resolution J

Hardin-Larue County Medical Society

RESOLVED, that each of the specialty societies represented on the KMA Interspecialty Council be represented by one Delegate and one Alternate Delegate to the KMA House of Delegates with all privileges thereof. The Delegates and Alternate Delegates are to be designated by their representative society.

Recommendations, Reference Committee No. 6

The Committee next considered Resolution J—Specialty Representation in the KMA House of Delegates, introduced by Hardin-Larue County Medical Society. There was a free discussion of the features of this resolution. Concern was expressed that specialty viewpoints might be lost in collective action of this organization. Others cautioned against making the House an unwieldy organ with very many members if all possible components are to have special representation. The point which most impressed the Reference Committee was a view that the KMA is a group of physicians all acting for our collective good and that, while most, if not all, specialties are already represented, we must take care, as physicians, to seek the common good, taking the broadest possible view of issues that we consider. Therefore, the Committee recommends that this resolution not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Resolution V

Campbell-Kenton County Medical Society

WHEREAS, the United States Supreme Court, in the Wade and Bolton decision of January 22, 1973, legalized the practice of abortion, i.e., the destruction of life of an unborn human being, with very few restrictions, and

WHEREAS, subsequent thereto, there has developed a dramatic and startling escalation of advocacy, by litigation and legislation, of other anti-life practices and philosophy, including the affirmative destruction of life of other classes of human beings, including aged, retarded and terminally ill, and unethical medical experimentation upon live human beings, intrauterine as well as extrauterine, all of which practices are contrary to and repugnant to the best traditions of medical practice and medical ethics, as well as traditional Judeo-Christian values, and

WHEREAS, the issue is of such great magnitude —the extent to which all innocent human life is protected under the Constitution; therefore be it

RESOLVED, that the Campbell-Kenton Medical Society, does hereby condemn and deplore all such practices, referred to above, and does hereby urge the passage, by the Kentucky Medical Association, of this Resolution, and all subsequent resolutions contained herein, as follows; and be it further

RESOLVED, that physicians should reaffirm the principles of the Oath of Hippocrates, and are mandated to protect and preserve all human life to the utmost of their abilities; and be it further

RESOLVED, that the Kentucky Medical Association restates its conviction that the deliberate interruption of pregnancy at any stage, except for the purpose of saving the life of the unborn child, and except for the purpose of performing those medical procedures required to prevent the death of the mother, is reprehensible and in violation of the ethical principles which must govern the conduct of the members of our profession; and be it further

RESOLVED, that there is clearly indicated the necessity for an amendment to the United States Constitution, protecting the right of life of all human beings, irrespective of age, health, function or condition of dependency, including their unborn offspring at every stage of their biological development, which amendment should guarantee that no unborn person shall be deprived of life by anyone, and which amendment should not prohibit a law permitting only those medical procedures required to prevent the death of the mother; and be it further

RESOLVED, that in the interim, pending the passage of such amendment, properly according to all human beings the equal protection of the law to which they are entitled, the following Resolutions are urgently required; be it further

(A) RESOLVED, that any live infant resulting from an abortion or attempted abortion must be accorded the same rights and the same care that would be given to an infant delivered by more traditional means; and be further

(B) RESOLVED, that the practice of using human

beings, intrauterine or extrauterine, as experimental material, is condemned, unless (A) with respect to an unborn child carried out to promote the health of the child, or (B) with respect to a legally competent adult with his knowledge and consent; and be it further

(C) RESOLVED, that proposed legislation, variously denominated "death with dignity" or "euthanasia", is opposed and condemned. There is no law, no medical ethic and no religious ethic opposing the true "good dying" practice, i.e., the passive support (ordinary life support measures) of a terminally ill patient, in extremis. There is no law, no medical ethic and no religious ethic which requires the use of heroic measures for the treatment of a terminally ill patient in extremis. Nor is there one recorded prosecution with respect to this situation. Such proposed legislation is, therefore, at best, unnecessary, and at worst, the first installment of a philosophy bent upon the eradication of "sub-standard" human beings, evidence of which philosophy is available in some of the current medical journals, and, be it further

(D) RESOLVED, that no person or institution, physician, nurse, hospital or employee shall be required to participate in any of the above-described practices, contrary to his, hers or its ethical policy, nor discriminated against for such refusal, and be it further

(E) RESOLVED, that all medical insurance contracts applicable in this State shall:

(1) Provide the same insurance for costs of maternity to unmarried women that it provides to married women including the wives of employees choosing family coverage. Each such policy shall provide the same coverage for the child of an unmarried mother that the child of an employee choosing family coverage would receive.

(2) Provide no benefits for elective abortion, unless such contracts offer said benefits as an elective coverage, for which there is charged a separate and additional premium.

Recommendations, Reference Committee No. 6

Resolution V—Current KMA Policies Concerning Abortion and Euthanasia, introduced by Campbell-Kenton County Medical Society, was read and its complexity noted. The Committee felt that it dealt with a variety of problems about which there is obviously much disagreement in our society. In view of the fact that KMA already has a position on abortion, and the AMA has a position on euthanasia, and because the resolution is so broad, the Committee recommends this resolution not be approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 6 as a whole, as amended.

The motion was seconded and carried.

Additionally, Mr. Speaker, I would like to thank the members of Reference Committee No. 6, Doctors John M. Baird, Gary D. Givens, C. Nicholas Kavanaugh and M. L. Peyton, for their patience and good judgment. Also, we thank those who testified before the Committee, aiding in our deliberations, and those officers of our Association who counseled us. We also are thankful for the good nature and skill of Mrs. Roessler, our able secretary and assistant.

REFERENCE COMMITTEE NO. 6
David L. Stewart, M.D., Louisville, Chairman
John M. Baird, M.D., Danville
Gary D. Givens, M.D., Central City
C. Nicholas Kavanaugh, M.D., Lexington
M. L. Peyton, M.D., West Liberty

Unfinished Business

Doctor Cooper recognized Paul J. Parks, M.D., Bowling Green, Chairman of the Board of Trustees. Doctor Parks moved, on behalf of the Board of Trustees, that the name of E. C. Seeley, M.D., London, be placed in nomination for re-election to a full four-year term on the KMA Judicial Council. The motion was seconded from the floor and carried unanimously.

Election of Officers

Keith M. Coverdale, M.D., Bowling Green, a member of the KMA Nominating Committee, then proceeded to the podium to give the report of the Nominating Committee. He read the following list of nominations for the positions noted:

President-Elect (Elected from the State at Large)	Paul J. Parks, M.D. Bowling Green
Vice President (Elected from the State at Large)	John M. Baird, M.D. Danville
Secretary-Treasurer	S. Randolph Scheen, M.D. Louisville
AMA Delegates (2)	Fred C. Rainey, M.D. Elizabethtown David B. Stevens, M.D. Lexington
AMA Alternate Delegates (2)	Bennett L. Crowder, II, M.D. Hopkinsville (elected to fill vacancy created by resignation of William W. Hall, M.D.) Thomas L. Heavern, Jr., M.D. Highland Heights

No additional nominations were received from the floor; therefore, it was moved and seconded that the nominees listed above be elected. Motion carried.

Doctor Parks was then escorted to the podium and received a standing ovation.

Doctor Coverdale then submitted the following nominations for the office of Trustee and Alternate Trustee on behalf of the district nominating committees:

Fifth District	Cecil L. Grumbles, M.D. Louisville
Alternate	Glenn W. Bryant, M.D. Louisville
Sixth District	Earl P. Oliver, M.D. Scottsville
Alternate	L. Martin Wilson, M.D. Bowling Green
Eighth District	Richard J. Menke, M.D. Covington
Alternate	Robert C. Smith, M.D. Newport
Eleventh District	Dwight L. Blackburn, M.D. Berea
Alternate	Robert L. Davis, M.D. Winchester
Fifteenth District	Harold L. Bushey, M.D. Barbourville
Alternate	W. H. Stepchuck, M.D. Harlan

It was moved and seconded that the above slate of nominees be elected. Motion carried.

Nominations for Kentucky Physicians Mutual, Inc. Board of Directors

The following list of nominees for the Board of Directors, Kentucky Physicians Mutual, Inc., was submitted and received for information only:

William P. Vonderhaar, M.D., Louisville
Roy H. Moore, III, M.D., Louisville
Norman Glaser, M.D., Louisville
Carroll H. Robie, Jr., M.D., Louisville
John S. Llewellyn, M.D., Louisville
David B. Stevens, M.D., Lexington
Stuart Graves, M.D., Louisville
S. Randolph Scheen, M.D., Louisville
John M. Baird, M.D., Danville
Bennett L. Crowder, II, M.D., Hopkinsville
William M. Blalock, M.D., Paducah
James B. Holloway, M.D., Lexington
Robert N. McLeod, M.D., Somerset
Fred C. Rainey, M.D. Elizabethtown

Election of 1976 Nominating Committee

The following physicians were elected by the House of Delegates to serve as the Nominating Committee for the 1976 Annual Meeting:

Leslie W. Blakey, M.D., Lexington, Chairman
Max P. Jones, M.D., Pikeville
William E. Pearson, M.D., Owensboro
Lewis E. Wesley, M.D., Liberty
J. Sankey Williams, M.D., Nicholasville

It was announced the Board of Trustees would hold its reorganizational meeting on Thursday at noon in the Jeffersonian Room of the Ramada Inn; and would further meet in joint session with the KEMPAC Board at 2:30 p.m. in the same room.

Doctor Cooper reported statements for the $50 assessment would be mailed from the KMA Headquarters within a matter of weeks, and urged that everyone remit payment as soon as possible upon receipt of the bill.

At 11:45 p.m. Doctor Cooper announced the second session of the 1975 KMA House of Delegates would Stand in Adjournment, and thanked the members for their participation and cooperation.

Support Our Advertisers

When you see an advertisement in The Journal of the Kentucky Medical Association which you feel does a service to you, the physician, and to the medical profession, it would be helpful to us if you would take a few minutes from your day to send a note of appreciation to the advertiser.

1975 CONSTITUTION AND BYLAWS
OF THE
KENTUCKY MEDICAL ASSOCIATION

Revised September 24, 1975

CONSTITUTION

Article I.	Name of the Association
Article II.	Purpose of the Association
Article III.	Component Societies
Article IV.	Composition and Meetings of the Association
Article V.	Officers
Article VI.	House of Delegates
Article VII.	Districts, Sections and District Societies
Article VIII.	Board of Trustees
Article IX.	Funds and Expenses
Article X.	Referendum
Article XI.	The Seal
Article XII.	Amendments
Article XIII.	Definitions

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Article V. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, a Vice-President, a Secretary-Treasurer, a Speaker and Vice-Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component societies in such manner as may be provided in the bylaws. Officers of the Association, Delegates and Alternate Delegates to the American Medical Association, and the five immediate Past Presidents shall be ex officio members of the House of Delegates and entitled to vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem

appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

Chapter I. Membership
Chapter II. Annual and Special Meetings of the Association
Chapter III. The House of Delegates
Chapter IV. Election of Officers
Chapter V. Duties of Officers
Chapter VI. Board of Trustees
Chapter VII. Discipline—The Judicial Council
Chapter VIII. Standing Committees and Councils
Chapter IX. Assessments and Expenditures
Chapter X. Rules of Conduct
Chapter XI. Rules of Order
Chapter XII. County Societies
Chapter XIII. Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Section 2. Membership in the Association shall be divided into nine classes, to-wit: Active, Emeritus, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) Emeritus Members. Component societies may elect as a member-emeritus any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Emeritus members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) In-Training Members. Interns, residents, and teaching fellows who are doctors of medicine or osteopathy and who have complied with all pertinent regulations of the State Board of Health. In-training members shall have the right to vote and receive all publications of the Association, but shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates.

(d) Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State.

(2) Osteopathic physicians who practice allopathic medicine.

Associate members shall not have the right to vote nor to hold office, but shall receive the Journal and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive the Journal and other publications of the Association.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from October 15 to October 14 of the next year. Student members may not hold office but may be voting members of any committee to which they are appointed. They will be represented in the House of Delegates through one voting representative, a student member of KMA elected by the student body at the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the student body at the University of Louisville School of Medicine.

(g) Service Members. Members of the Association in good standing who enter military service and are ineligible for Associate membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite dentists, pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 4. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of fifty duly elected delegates of the Association. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the Constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary-Treasurer following its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group. Immediately after the delegate has introduced the Resolution, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice-President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected from the state at large for terms of two years, with the provision that no more than one delegate and no more than one alternate delegate shall be elected from one component society. The Speaker of the House of Delegates, the Vice-Speaker and the Secretary-Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary-Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice-President, Secretary-Treasurer, Speaker or Vice-Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member may make known his availability for any office within the gift of the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well-publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom

and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary-Treasurer shall advise the Executive Director in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Director or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Committee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice-President, the President-Elect, the Secretary-Treasurer, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two trustees to be elected annually by the Board of Trustees. A majority of the full Board, to-wit, 14, and a majority of the full Executive Committee, to-wit, 5, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing vear. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Secretary-Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Secretary-Treasurer upon a proper itemized statement, but this shall not be constituted to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

Section 5. The Journal of the Kentucky Medical Association shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the Journal shall be elected by the Board. All money received by the Journal or by any member of its staff on its behalf, shall be paid to the Secretary-Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary-Treasurer acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Director whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Director shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Secretary-Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Secretary-Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Secretary-Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE — THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or as Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary-Treasurer shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or

district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In the case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation, the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable the Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recomendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary-Treasurer a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

Section 10. No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judicial Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary, ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Members, $225; (2) Emeritus Members, no dues; (3) Associate Members, $25; (4) In-Training Members, $20; (5) Inactive Members, $25; (6) Student Members, $10; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on

the basis of the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary-Treasurer of this Association as of the first day of January each year.

Section 2. Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in the latest edition of Sturgis' Standard Code of Parliamentary Procedure, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 4. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolutions, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 12 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

Section 5. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter I, Section 2 of these Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 6. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 7. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 8. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 9. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw,

rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

Section 10. Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 11. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary-Treasurer of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

Section 12. The secretary of each component society shall keep a roster of its members and a list of nonaffiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary-Treasurer of the Association, on the first day of January of each year, or as soon thereafter as possible, and at the same time the dues accuring from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

CHAPTER XIII. AMENDMENTS

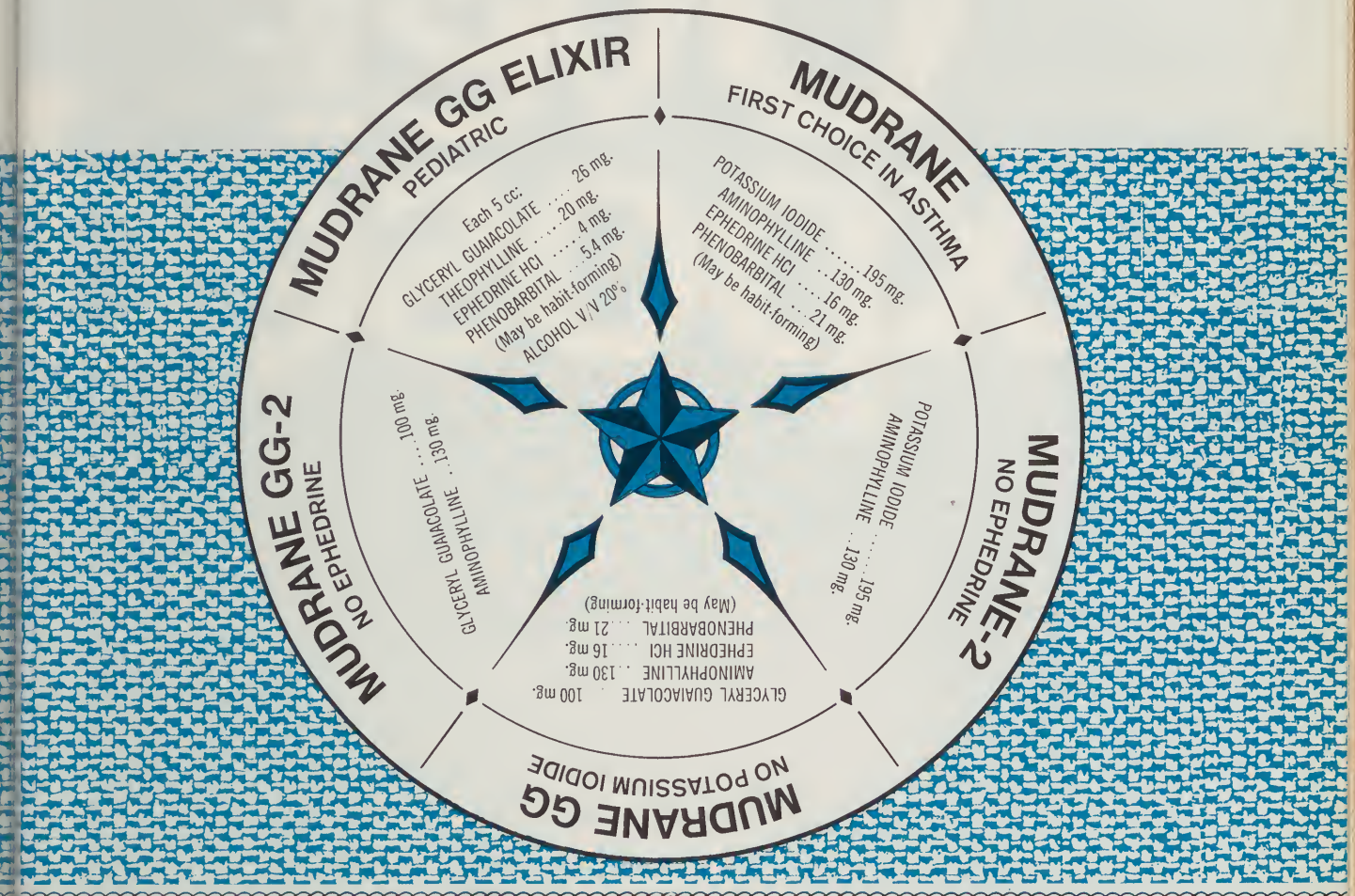
Section 1. These bylaws may be amended at any session of the House of Delegates by a majority vote of the delegates present at that session, provided: (1) the amendment proposed is presented in writing to the delegates thirty days prior to the session, or, (2) the amendment is introduced in writing at a regular session of the House of Delegates and considered at the following session, the vote on said amendment having been postponed definitely for a period of at least one day.

Section 2. An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final session of the House of Delegates, but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

Section 3. An amendment to these bylaws may be proposed in writing by an individual delegate at the final session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final session is adjourned. Such an amendment having not been postponed definitely for a period of one day, requires a two-thirds vote.

The MUDRANES

Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23261

the sun and solar keratosis...

Over-exposed



and often underdiagnosed

Solar keratosis is not an uncommon medical problem.

Of course, the prevalence of keratotic lesions is greater in locations south of the 38th parallel—the so-called "Solar Keratosis Belt"—receiving the greatest amounts of solar radiation. However, solar keratosis can occur among any light-skinned population, usually in persons over 40, wherever people are subject to extended exposure to the sun.

Solar keratoses are generally not difficult to identify.

These skin lesions are usually multiple, flat or slightly elevated, brownish or red in color, papular, dry, rough, adherent and sharply defined. They are found on areas of the skin having extensive exposure to sunlight. Clinical characteristics of the lesions, their predominant location on exposed surfaces, the age of the patient and his skin type are important considerations in the diagnosis.

Solar keratoses can, and should, be treated because they are potentially premalignant.

Chronic exposure to sunlight frequently leads to degenerative changes in the skin. This can often result in the development of multiple, potentially premalignant keratotic lesions. Therefore, early detection and treatment is advisable.

Treatment with Efudex (fluorouracil) provides a high degree of effectiveness with a low recurrence rate, ease and convenience of therapy, low incidence of scarring, excellent cosmetic results in most cases, and a high level of patient acceptability.

Efudex® 5% Cream
fluorouracil/Roche®

Because there may be more than meets the eye.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris (hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

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Case history for patient photographed at left on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

1975-76 KMA COMMITTEES

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Mrs. Janice Owens, Campbellsville
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Claims and Utilization Review Committee

(To be appointed in January, 1976)

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William W. Hall, M.D., Owensboro (Key Man for Senator Ford)
Wally O. Montgomery, M.D., Paducah (Key Man for Congressman Hubbard)
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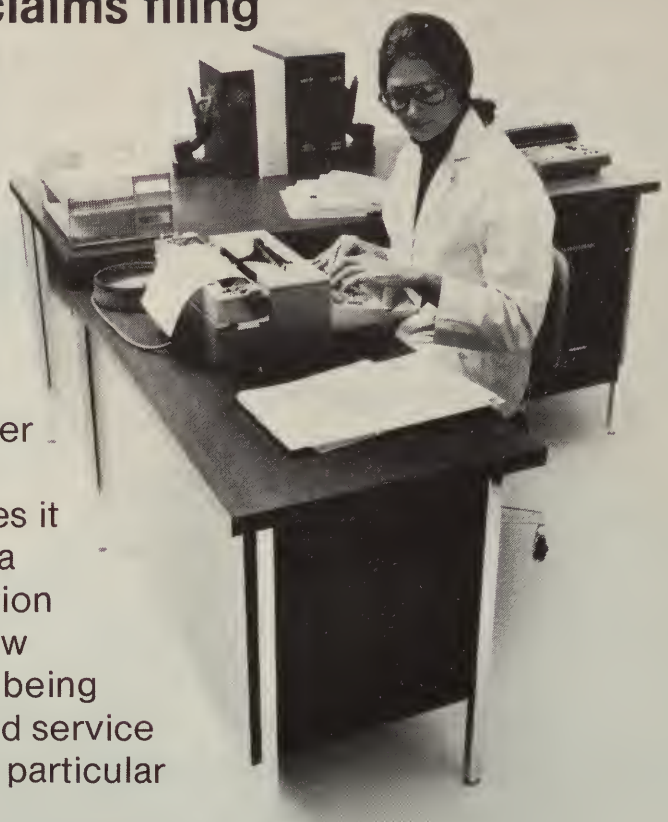
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OWENSBORO	Doctors Bldg., 1001 Center Street

GUILD OPTICIANS

Southern Optical

CHARGE ACCOUNTS INVITED
BankAmericard
Master Charge

Maybe the patient's self-diagnosis is right. He could have hay fever. But that bright red nasal mucosa, along with the thick discharge and excoriation around the nares, strongly suggests that the main problem is a cold. Hay fever or another form of allergic rhinitis may or may not be an underlying factor.

If a complete history and examination rule out allergic rhinitis, the long-term outlook will be a lot more favorable than his own "diagnosis" would have indicated.

But right now, whether he's got allergic rhinitis or a cold, he's suffering from the same irritating symptoms of drip, congestion and stuffiness. Try DIMETAPP EXTENTABS®. They're formulated to relieve these symptoms without much chance of causing drowsiness or overstimulation. Your patients will appreciate the 24-hour relief they can get from just one tablet every 12 hours.

Cold or Allergy?



Whether it's a cold or an allergy, Dimetapp Extentabs® relieve stuffiness, drip and congestion.*

*INDICATIONS

Based on a review of this drug by the National Academy of Sciences — National Research Council and/or other information, FDA has classified the following indications as lacking substantial evidence of effectiveness as a fixed combination: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.

CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.

WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.

PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.

ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.

HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

A·H·ROBINS

A. H. Robins Company, Richmond, Va. 23220

when pain goes on... and on... and on–



For the patient with a terminal illness, PAIN past, present, and future can dominate his thoughts until it becomes almost an obsession. The more he is aware of the pain he is now experiencing, the more difficult it is to erase his memory of yesterday's pain, and to allay his fearful anticipation of tomorrow's pain.

Surely the last thing this patient needs is an analgesic containing caffeine to stimulate the senses and heighten pain awareness. A far more logical choice is Phenaphen with Codeine. The sensible formula provides ¼ grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can help control the pain more effectively. Don't you agree, Doctor, that psychic distress is an important factor in most of your terminal and long-term convalescent patients?

the analgesic formula that calms instead of caffeinates

Phenaphen® with Codeine

Phenaphen with Codeine No. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Codeine phosphate, ¼ gr. (No. 2), ½ gr. (No. 3) or 1 gr. (No. 4) (warning: may be habit forming).

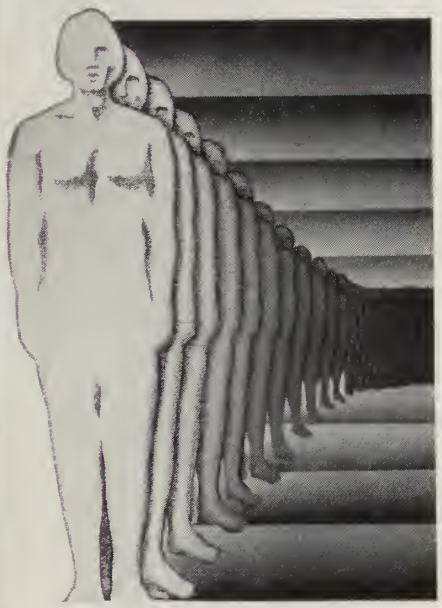
Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products, excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

Ⓒ III Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on written or oral prescription and may be refilled 5 times within 6 months, unless restricted by state law.

A. H. Robins Company, Richmond, Va. A·H·ROBINS

PERFORMANCE. IT'S A MATTER OF RECORD.

- an unsurpassed record validated in several thousand clinical papers
- rarely interferes with mental acuity
- wide margin of safety



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 to 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

LIBRIUM® C IV

chlordiazepoxide HCl/Roche
5 mg, 10 mg, 25 mg capsules

IN PAINFUL ACUTE CYSTITIS*

*nonobstructed; due to susceptible organisms



RELIEVE THE PAIN WHILE YOU ELIMINATE THE PATHOGENS.

FOR THE PAIN

☐ **Early relief of painful symptoms** such as burning and pain associated with urgency and frequency.

FOR THE PATHOGENS

☐ **Effective control of susceptible pathogens** such as *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

Appropriate antibacterial therapy: Up to 3 days therapy with Azo Gantrisin 4 to 6 tablets *Stat.*, then 2 tablets *q.i.d.*; then 11 days with Gantrisin (sulfisoxazole) may be considered.

AZO GANTRISIN®

(50 mg phenazopyridine HCl and 0.5 Gm sulfisoxazole)

Before prescribing, please consult complete product information, a summary of which follows.

Indications: In adults, urinary tract infections complicated by pain (primarily cystitis, pyelitis and pyelonephritis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. *Important Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents including the sulfonamides. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period. Contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established. Teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis. *C.N.S. reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infections is 4 to 6 tablets initially, then 2 tablets four times daily for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment of the infection with Gantrisin (sulfisoxazole) may be considered.

Note: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after ingestion.

How Supplied: Tablets, each containing 0.5 Gm sulfisoxazole and 50 mg phenazopyridine HCl —bottles of 100 and 500.

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Nutley, New Jersey 07110

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